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American Ornithology.

For the Home and School.

EDITED BY C. ALBERT REED.

Vol. I.

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CHAS. K. REED, PUBLISHER,
1901.

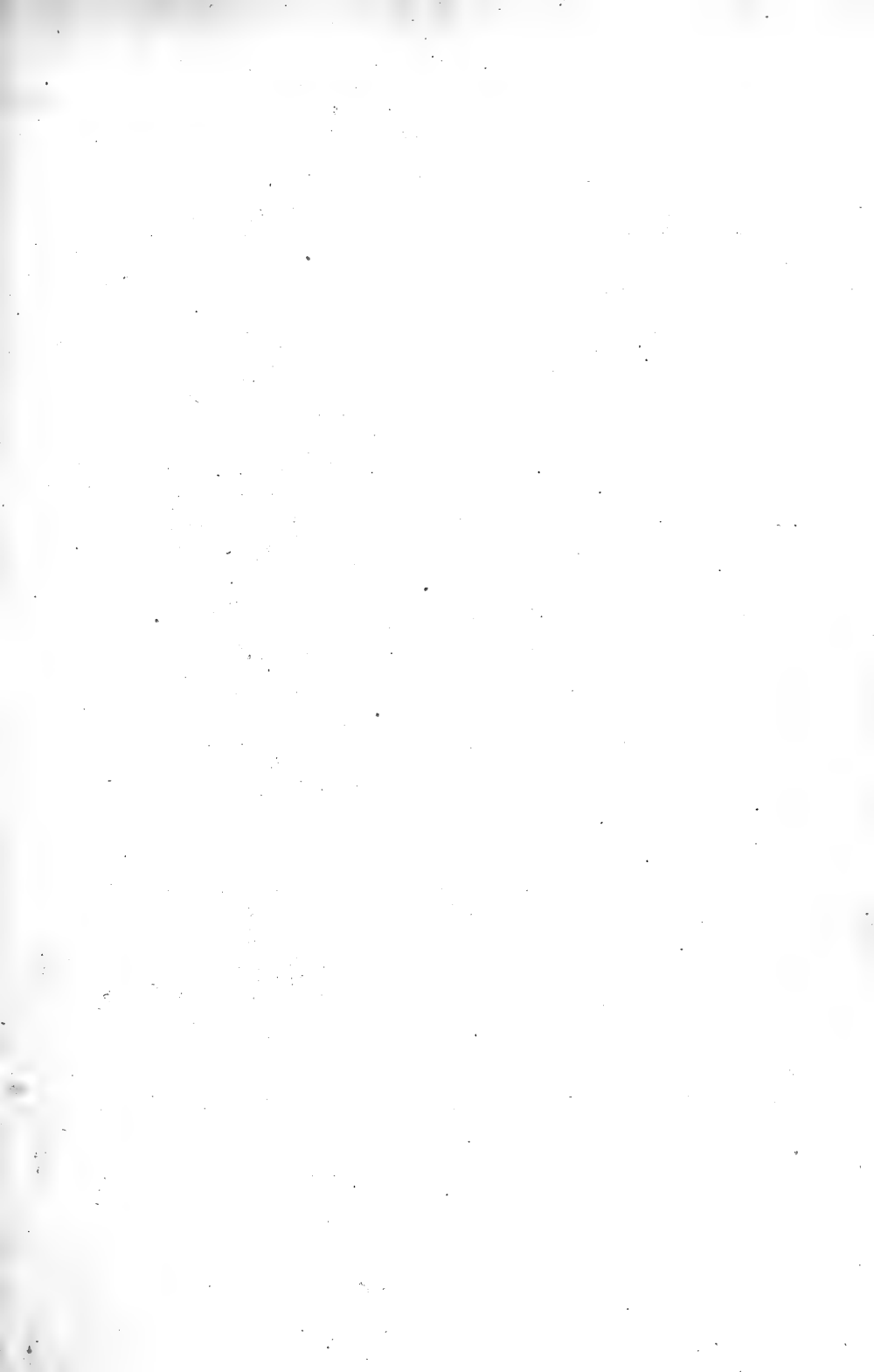


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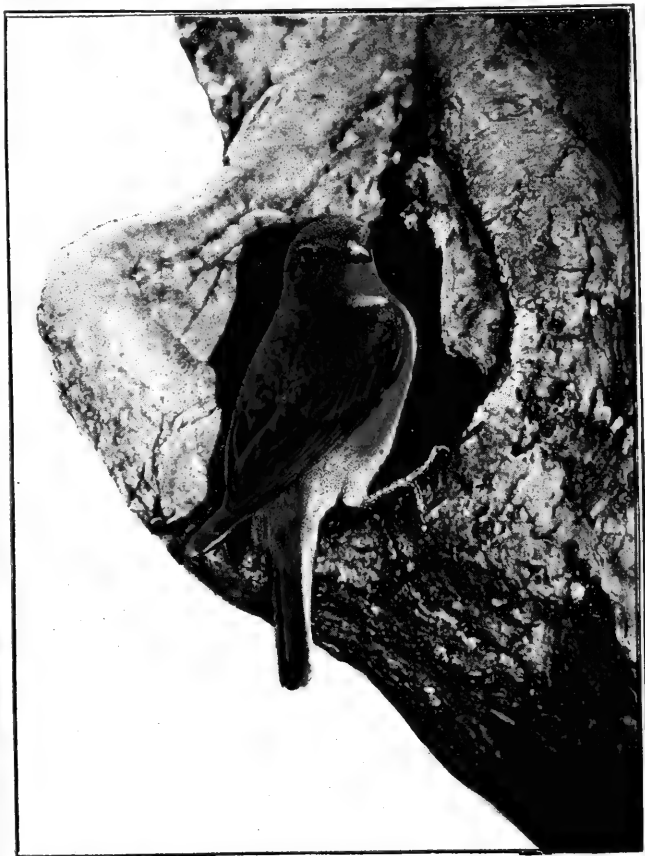


Photo from life.

1901

BLUEBIRD.

To The Bluebird.

O harbinger of sunny Spring,
Of springing buds and flowers,
Of skies as blue as are your wings,
Of sunny April showers.

When borne upon the chilling wind,
It comes from field and stubble,
I love to hear your thrilling note,
Your sweet melodious warble.

The orchards soon will be in bloom,
And winds their fragrance blowing,
Shall waft their odors far and near,
O'er every field and mowing.

And soon across the field we'll hear
The Golden Flicker, hammer,
And from the gate the robin's call,
The first sweet note of Summer.

To thee, thou harbinger of Spring,
The naked woodland bowers
Are giving joyful welcoming
For promised April showers,

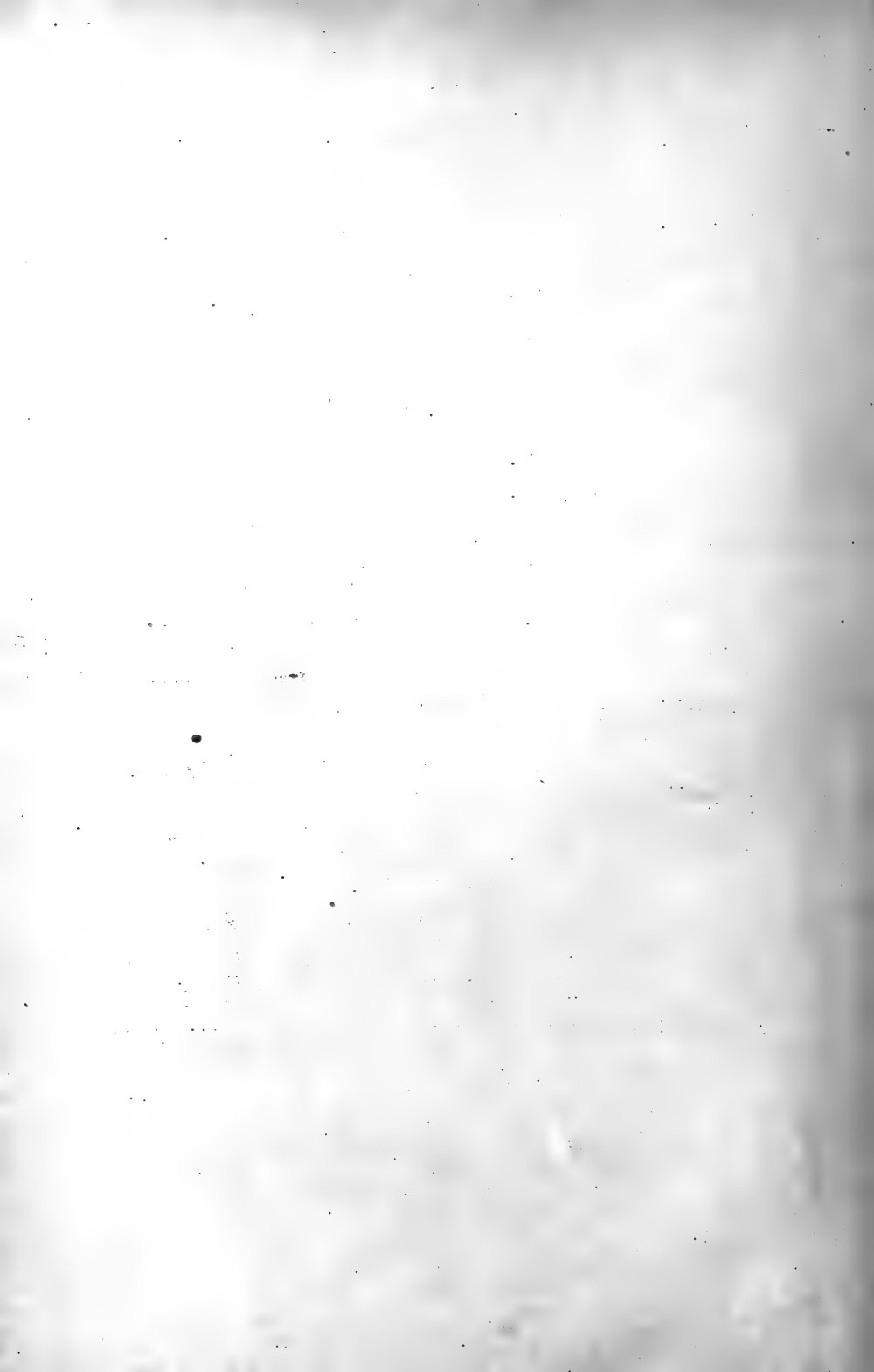
We greet thee, too, you azure bird,
Thou promise of the pleasures,
Which Spring and Summer bring to us,
With all their golden treasures.

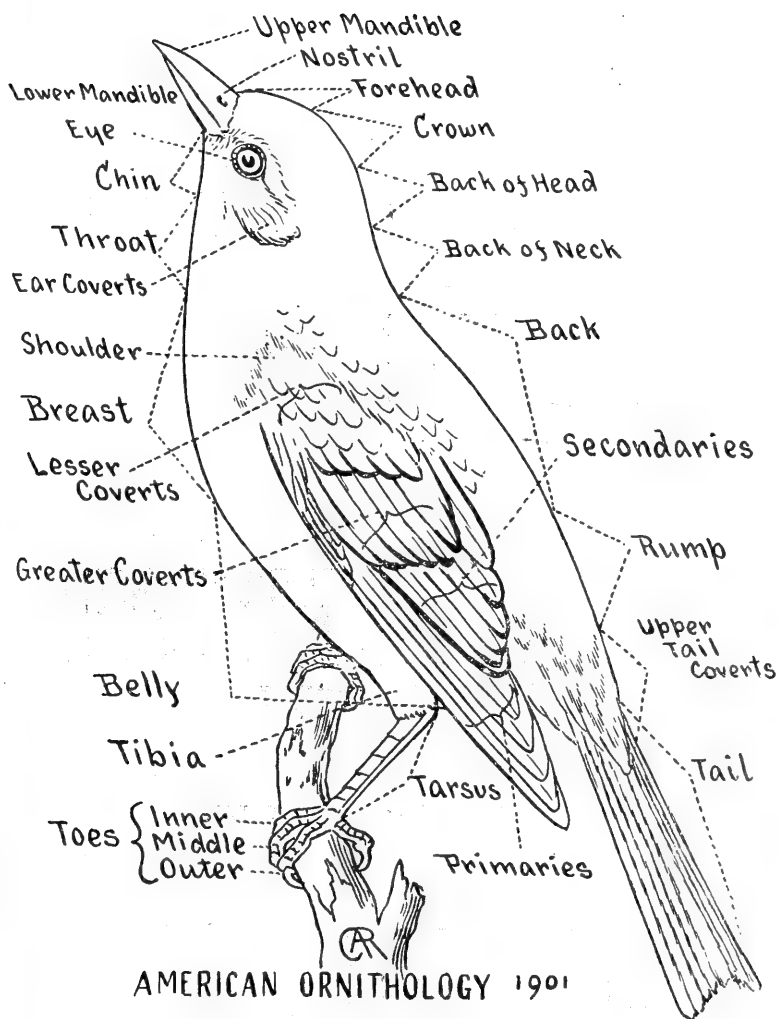
C. E. GORDON.



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AMERICAN ORNITHOLOGY 1901

SCARLET



CRIMSON

ORANGE



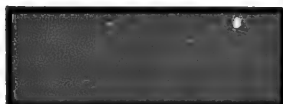
PINK

YELLOW



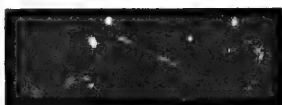
CHESTNUT

BUFF



BROWN

PURPLE



OCHRE

AMERICAN ORNITHOLOGY.

Bird Color Chart

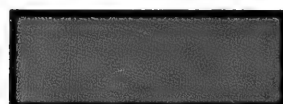
WORCESTER, MASS.

OLIVE



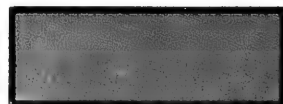
INDIGO

Olive Green



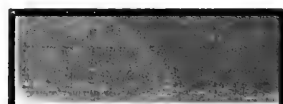
BLUE

GREEN



L. BLUE

ASH



GRAY

Pearl Gray



SLATE



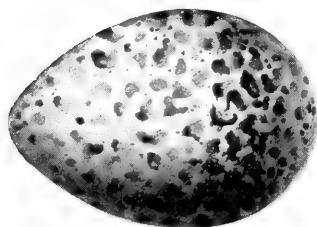
Vol. I.

January, 1901.

No. 1



COMMON TERN.



COMMON TERN.**A. O. U. No. 70.***(Sterna Hirundo.)***RANGE.**

Found over the whole of North America, but more commonly in the eastern parts, wintering in the South.

DESCRIPTION.

Average length, 14.50 inches; extent of wings, 30 inches; length of tail, 6.25 inches. Color:—Back and wings pearl gray, with primaries dusky on the outer webs, and white on the inner; throat white, shading to ashy on the breast; top of head black; tail white, except outer web of outer feathers, which are dusky; bill red, tipped with dusky; eyes brown; legs coral red. In winter, paler, and the black on the top of the head replaced partly by white. Young:—Similar to winter adult; bill black.

NEST AND EGGS.

Nest placed on the ground on sandy outlying islands. It is composed of a few pieces of grass in slight hollow in the sand. Eggs three to four in number; ground color varies from greenish white to brown spotted, and blotched with brown and lilac of different shades.

HABITS.

This bird, also called the sea swallow, Wilson's tern, and mackerel gull, is the prettiest and most graceful of all the sea-birds. It frequents low coasts, the borders of lakes and mouths of the large rivers.

A more striking scene cannot be imagined than a number of these swallows of the sea flitting here and there in sport or in quest of their food which consists principally of small fish. Some are executing the most fantastic gambols high up in the air; others, seated on the surface of the water, are rocked to and fro by the waves; still others are skimming over the

surface of the water; suddenly one dips his head beneath the surface with lightning-like rapidity and seizes some luckless fish that happened to be in his path.

They live together in colonies of hundreds, and often thousands, on a single island, at night roosting on the ground near the water. They gather together about sunset for this purpose, although their voices are to be heard far into the night, and again early in the morning while trimming their feathers for the day.

Perhaps a visit to their homes will prove interesting. We make the start before daybreak, having

engaged an old fisherman and his sloop for the day. When the sun shows his face above the water, we are speeding swiftly to some outlying islands, which our guide informs us are thickly populated with sea gulls and terns.

We are now approaching a low, sandy island without a sign of trees and shrubs; the middle, however, is covered with salt marsh-grass. Up to this time only a few terns have been observed, but as we draw near the island it seems to take life, and a cloud of thousands of terns are soon circling about us, and the air is full of their hoarse, grating cry of "creak-ee—creak-ee."

What a sight meets our eyes when we make a landing. The ground is literally covered with nests, each containing from two to four eggs, and occasionally one with five. There is no attempt at nest-building, except in a few cases, the majority being a hollow scooped out in the sand. It does

not seem possible that the birds can find their own nest among that vast number, they being so close together that we can scarcely avoid treading on them. Having walked the length of the island and back, the birds meanwhile almost deafening us with their cries, we relieve their anxiety, concerning their homes by taking our departure.

As long as the island remains in sight we can hear the familiar cry, "creak-ee, creak-ee;" ringing in our ears. I must not forget to add what to me proved to be a very interesting feature of this trip, and that is the lobsters which our guide kindly obtained from some of his traps and boiled for us.

What a pity that these beautiful and interesting birds should meet the untimely end that awaits them, unless some more stringent laws are made, and enforced, to prevent the slaughtering of them for millinery purposes.





MAGNOLIA WARBLER.



MAGNOLIA WARBLER.**A. O. V. No. 657.***(Dendroica Maculosa.)***RANGE.**

Eastern North America, west to the base of the Rocky Mountains, and casually to British Columbia; breeding from northern New England, northern New York, and northern Michigan, to Hudson Bay territory, and southward to the Alleghanies in Pennsylvania. In winter, Bahamas, Cuba and south through eastern Mexico to Panama.

DESCRIPTION.

Length, five inches; extent of wing, 7.50 inches; length of tail, 2.25 inches. Color, male (in spring), bill, bluish black; eyes, brown; top of the head, bluish gray. A black line extends across the forehead at the base of the bill, through the eye, where it widens into a black patch on the side of the head, and continuing around the base of the neck forms a large black patch in the middle of the back. A white stripe extends from over the eye down the side of the neck; a short white stripe under the eyes; tail black, each feather except the middle two having a square white patch on the inner web about midway. The upper tail coverts black, under coverts white. Tail, rump and under parts yellow. There is a black patch on the lower part of the throat, extending down the sides in stripes. Wings black with inner webs edged with gray. Two wide bands sometimes merging into one, across the wing; these are formed by the coverts, the feathers margining the black patch on the back, edged with greenish yellow. (In autumn) the black is duller, and nearly absent on sides of the head and on the back, with less white on the wings. Female similar to the male with black markings obscured with greenish, and top of the head is paler. This warbler may be known by the white band on the tail which is always present in all stages.

NEST AND EGGS.

Nests usually placed in evergreen trees. They are composed of small twigs, weeds and dried grass, not very compactly woven, and lined with fine horse hair and fibrous roots. The structures are very neatly made. Eggs are four or five in number, oval in shape, white, spotted and blotched with brown and lilac, mostly around the larger end, where they sometimes form a wreath.

HABITS.

Among the great variety of birds which we have in this country, none appear to attract the popular attention to so great an extent as the warblers; perhaps it is because of their more brilliant and diversified plumage, which renders them conspicuous among the green foliage of the trees, and furnishes a ready means of identification, especially among the male birds.

The black and yellow warbler, as it is commonly called, is one of the most beautiful of this interesting family. It might be called one of the most common among the rarer warblers, being neither very common, nor yet difficult to find in his season. During the spring migration you can always find this bright little fellow flitting about among the lower branches or among the thick under-brush in most any low woods. It also shows a great liking for apple trees when the buds begin to open, assuming every imaginable attitude in his search for small insects, and exhibiting the greatest dexterity in catching passing insects on the wing. Occasionally it misses catching a moth, and it is amusing to see him make the most frantic efforts to capture his prey. He appears to lose all control of himself, but I have never seen him fail to recover both himself and the moth before falling to the ground; then with a happy chirp he will

fly back to the tree in search of more food. These warblers are not at all timid and are very inquisitive. If when observing them you remain still, they will come to the side of the bush nearest you then with a defiant chirp retreat back again, and their clear sweet song will be heard from within the depths of the foliage.

They are very sociable birds, and appear to be loath to leave your society, for as long as you remain quiet they will continue feeding close by, every few minutes favoring you with one of their choice vocal selections. I think that Massachusetts is about the southern limit of their breeding locality. I found several nests of this species in Massachusetts, and all have been in pine trees from fifteen to twenty feet from the ground, but further north where they breed more abundantly they build lower, generally from three to ten feet above the ground.

If you happen to be in the vicinity of their nest, both male and female show great distress, flutter about among the branches with wings and tail expanded, and uttering sharp warning chirps. They are equally solicitous about the welfare of their neighbors, and if the home of any other species is in danger they will add their protestations to those of the parents' and attempt to drive the invader away.

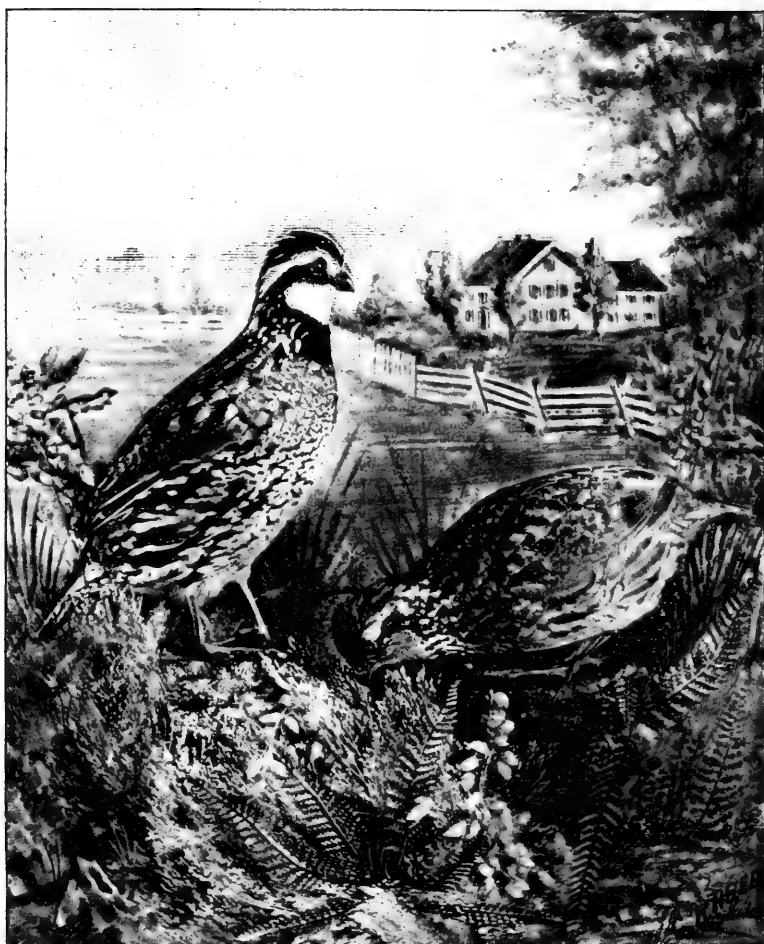
The fall migration commences

about the latter part of August. The old birds are then reinforced by the young. While there are greater numbers, they are not as noticeable as in the spring, be-

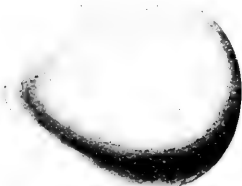
cause of less activity and duller plumage. The young males are similar in plumage to the adult female, except that the yellow breast is a little brighter.



NEST OF MAGNOLIA WARBLER.



BOBWHITE.



BOBWHITE.**A. O. U. No. 289.***(Colinus Virginianus.)***RANGE.**

Eastern United States, excepting northern Maine and Florida. West to Dakota, Kansas, Nebraska and east Texas. It is gradually finding its way farther west.

DESCRIPTION.

Average length, 8.75 inches. Extent of wings, 15.50 inches. Length of tail, 2.75 inches. Color, male, black cinnamon rufous with all the feathers edged with dull yellow and barred with fine lines of black. Primaries dusky. Band of rich brown edged with black extending from the bill through the eye and down the side of the neck, where it is interspersed with a few white feathers; the black edge extends across the breast in a broad band, ending abruptly against the white throat and shading into cinnamon, mixed with white on the breast. Under parts white, slightly tinged with yellowish, each feather being crossed by a V-shaped black bar. Sides streaked with cinnamon and barred with black. Tail ashy gray, with coverts cinnamon, barred with white and streaked with black. Band of white extends from bill over the eye to base of neck. Top of head cinnamon mixed with black. Eyes brown. Feet and legs brown, with toenails and bill black. Female, similar to male, except that throat and band over the eye are buffy instead of white, and the black markings of the male are replaced by a dull brown color. Young very similar to young brown leghorn chickens, except that they are much smaller, being about two and one-quarter inches long. Back brown, under parts buffy white, throat shows indistinctly. Also stripes over eye show though faintly. The black line through the eye shows quite clearly. Bill and feet brownish yellow.

NESTS AND EGGS.

The favorite nesting-place of the bobwhite is on the ground in a clump of tall grass or weeds. It may be in the corner of some fence up against the side of a stump or a wall. Occasionally the nest is arched over with the grass so as to form a tunnel, completely hiding the nest, but usually it is placed right out open, except as it is concealed by the tall grass.

The number of eggs laid varies from twelve to twenty-five; usually there are about eighteen. They are pure white unless nest stained; quite pointed at one end and rounded at the other.

HABITS.

The bobwhite is a sociable bird and is generally found near a farmhouse, around the edge of a grain field, or in the stubble. As soon as the breeding season commences, about the middle of May, the male may be heard almost any morning uttering his familiar cry of "bob-white," or "Oh bob-white," or as some prefer to translate it, "More wet," or "No more wet." This note is a clear whistle, the first ones low and the last of a higher pitch. It is a note very easily imitated, and I have frequently concealed myself in a clump of trees and kept up a spirited conversation with him for some time. At last his curiosity gets excited and he starts to investigate and see what other fellow is invading his domains. "Bob-white," the call sounds nearer; then again, nearer still. Then all is quiet for a few minutes, and I try in vain to obtain an answer. Suddenly from the top of the tree against which I am leaning comes his call, loud and clear. All my attempts to see from which direction he came have been in vain, but as soon as I leave the shelter of the trees and his watchful eye discerns me, he is off with a loud whirring of wings very different from that on his arrival.

He is always to be found near his mate when she is on the nest, cheering her with his song or bringing insects to her. As soon as the young are hatched they leave the nest and follow their mother in search of

food. If they are surprised and taken unawares, the mother gives a warning cluck, whereupon the young scatter in all directions and conceal themselves under the leaves; and very difficult it is to find them as they are just the color of the ground and leaves and will not move from their places until told to do so by their mother, even if in danger of being trod upon. In the meantime the old bird is performing the queerest of antics in the endeavor to lead the one who disturbed her sway from her little ones. She performs her part so well that most any one would naturally think she had a broken wing, or at least rheumatism in every joint, and that he could surely catch her. Although she stumbles over every little twig in the way, and actually seems to be giving the last gasp before expiring, she always manages to keep just beyond the reach of the extended hand. She leads her dupe on, until satisfied that her little ones will be safe from further disturbance from that source, then suddenly regaining her apparently lost strength is off with a whirr, and circles around to her little ones.

This strategy rarely fails with human beings, and probably succeeds just as well with foxes, which are one of their relentless enemies.

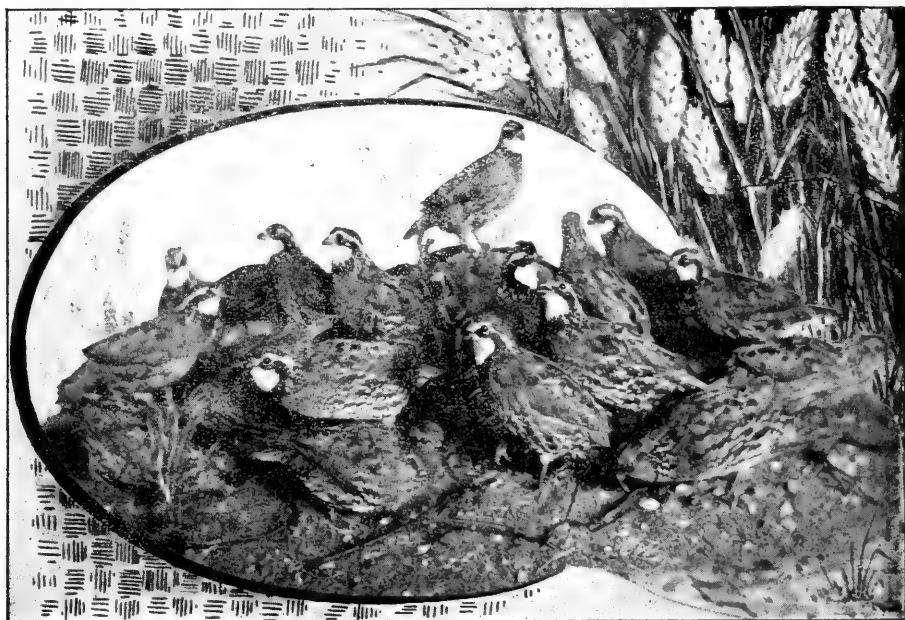
As soon as the young partridge begin to get the use of their wings, the male takes them in charge and leads them to the grain field, while

the female proceeds to raise a second brood. Unless the birds were wise in the choice of a nesting site, the second brood is likely to come to grief, as it is now mowing time and the ruthless knives of the mowing machines spare nothing in their path. Large numbers of nests are destroyed in this way. Both broods remain together in one flock until the spring. At night they seek an open place on the ground and, forming a circle, with their heads outward, go to sleep. If disturbed, they fly as headed, in all directions.

Their note when feeding in stubble is a single whistle with a rising inflection on the end; this is generally repeated three times. Their call for re-assembling, after being disturbed, consists of a soft whistle which sounds like "cur-ee, cur-ee." Their flight, which always starts with a loud whirring sound, is quite

rapid, but always in a straight line or a gentle curve. They do not rise until almost stepped upon, and then fly directly away from you, not separating much. Any hunter who is a fair shot and has a good dog, can secure nearly the whole flock by following them up. How can any one call it sport or the man a sportsman, who thus willfully in a single hour, wipes out of existence a whole family of innocent and beautiful birds.

During the past two or three years thousands of western quail have been liberated in New England in the hope of replenishing the covers, which are almost exhausted, but although they thrive well in this climate, I doubt much if they will be able to stand the pace the gunners, coupled with their other natural enemies are forcing them to.



GROUP OF BOBWHITE.

American Ornithology.

A MAGAZINE DEVOTED WHOLLY
TO BIRDS.

Published monthly by Chas. K. Reed,
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Edited by C. Albert Reed.

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Copy must be received not later than the 10th of preceding month.

We wish to extend thanks to our friends who have responded to our little prospectus in far greater number than we had expected, and for the good wishes which have come from every side. We shall endeavor to merit them.

We shall be glad to receive any short items or notes that you may think would be of interest to our readers. Remember that this magazine is for the advancement of our American birds, and we hope our readers will co-operate with us in this work. It is a very interesting study.

With this number we enclose a block of four subscription blanks. We will send four copies of this magazine each month to the same, or to four different addresses, for \$1.50. Here is a chance for a little missionary work. Just induce your friends to subscribe, or remember them with a subscription for a gift. It will not only benefit your-

self, but your friends also, for the one who knows the birds at sight is to be congratulated. We know that those who once subscribe will continue with us; hence this offer. It is our only reduction in price and is open to all.

Short Stories.

We want short stories or anecdotes concerning bird-life from all sections of the country, and shall offer each month a cash prize for the most interesting article about birds to contain not more than five hundred words. We will pay three dollars for the most acceptable received before February 1st.

We also want photographs of birds from life, and will give two dollars for the best that we receive before February 1st. These must not be blue-prints; but on black and white paper, so that we can make half-tones from them. With photos kindly send description of how they were obtained.

All photographs or manuscript submitted in these contests are to become our property, to be used if desired. Even if you do not win the cash prize, what you submit will undoubtedly prove interesting to our readers, and you can try again.

If any of our readers are in want of a camera, you can get nothing better than a "Poco," advertised elsewhere in this number. We have tried several kinds and use this one entirely now. The pictures for this number were taken with a 5x7 of this make.

FLICKER.**A. O. U. No. 412.***(Colaptes Auratus.)***RANGE.**

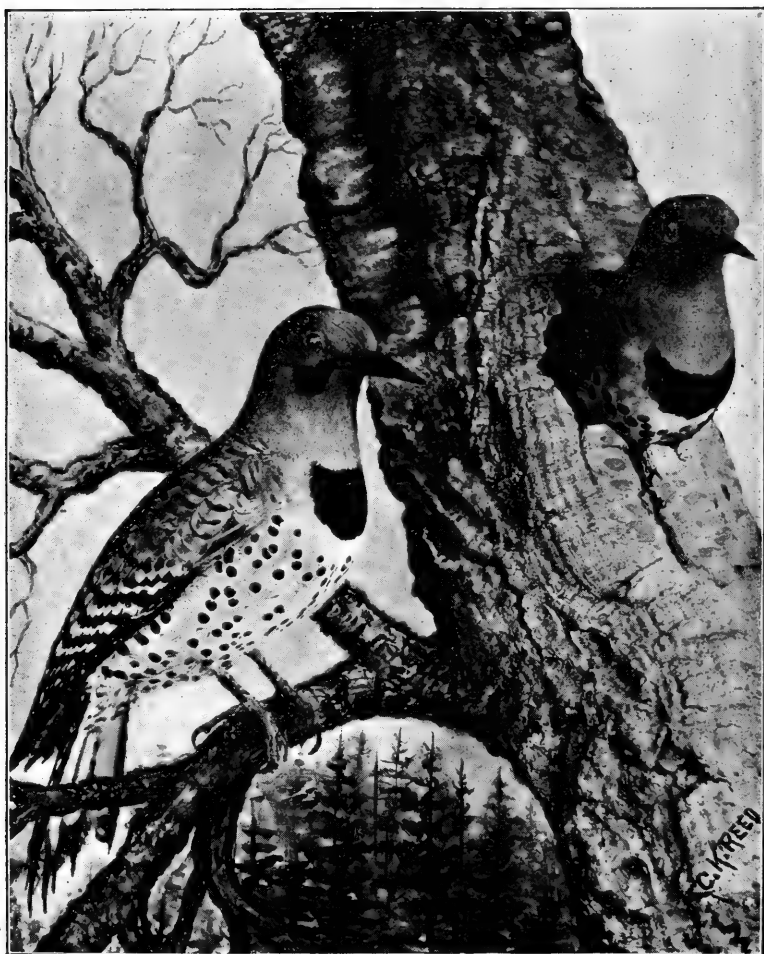
Northern and eastern North America; west to the eastern slope of the Rocky Mountains and Alaska. Accidental on the Pacific slope and in California.

DESCRIPTION.

Length, 12.5 inches. Extent, 19.25 inches. Tail 4.35 inches. Color, male, bill very dark slate color, eyes reddish brown, top of the head and back of neck slate color, merging into reddish ash at the throat and sides, and shading gradually to a dull white on the breast. The back is brown barred with black. There is a crescent-shaped patch of crimson on the back of the head. A patch on the side of the head extending from the bill downward, is black; crescent on the breast, and spots on the under parts and under tail coverts are black. Tail black, the outer web of the outer feather being barred with ash; also whole of quill, of outer tail feathers, and upper half of the rest; yellow on top, the ends being black; tail beneath golden yellow, except the tip, which is black. The tail feathers are all pointed and sharp at the tips. The outer wing feathers are black with yellow quills; the remainder are brown, barred heavily with black. The under part of wings golden yellow. Feet bluish ash.

NEST AND EGGS.

About the first of April the flickers begin to drill the hole for their nest. They generally select a dead limb for this purpose. The birds take turns in the excavating for a home, and the work proceeds quite rapidly. Sometimes the chips are carried to a distance and deposited, but oftener they are strewn about directly under the nest. They drill into the tree for about four inches, then downward to a depth of from six inches to two feet. The flicker deposits her eggs on the chips at the bottom of the hole, rarely lining it with anything, except occasionally with a few grasses. She lays from five to eight oval, white, glossy eggs, which have a pinkish tint when fresh. The flicker, unlike most birds, will continue laying after part of the eggs are removed; as many as thirty eggs have been taken from the same nest, by removing one each day.



FLICKER.



HABITS.

The flicker is familiarly known under the names of "golden-winged woodpecker," "yellow hummer," "yellow-shafted flicker," and often as "highhole." It is generally a shy bird, and, with its watchful eye always on the lookout for danger, most always manages to keep a goodly distance away. Sometimes, one bolder than his fellows, or perhaps one who has not yet arrived at the age of discretion, allows you to approach quite near. He generally manages, however, to keep on the opposite side of the tree trunk, only showing his head from time to time, to ascertain if you are evilly inclined.

Their flight, though rapid, appears laborious; each downward motion of the wings gives them an upward and forward impetus, the force of which is nearly expended before the next, thus making their progress a series of ups and downs. Unlike most of the woodpeckers, the flicker is at home on the ground and is to be found there quite often, especially in the fall, when families of six or eight birds may be found in a field. They hop about with a gait which, though awkward, answers their purpose, and creates havoc among the ants and worms. You will frequently see them sitting on an ant hill, gorging themselves with the insects. Their tongue being very long and barbed at the tip, is admirably adapted to this purpose. When disturbed at their work, they fly off

with a peculiar purring note. Their identity cannot be mistaken, on account of the undulatory motion of their flight, and because of the white patch on the rump, which shows very plainly.

The flicker is very affectionate in the mating season, and it is an amusing sight to see a male paying his respects to a flicker belle. He will sidle up to her with an endearing "flick—ah, flick—ah," and then retreat and peek shyly at her from behind the limb. This he repeats until accepted. If on the other hand he is rejected, he flies away to try his fortunes elsewhere.

Few birds have more command of the vocal organs than the flicker, and the number of their notes is unlimited. The two most familiar, and the ones that may be termed their characteristic notes, are a loud piercing shriek, and what I think is properly the flicker's song, a very loud "ki ki ki —" gradually falling off in pitch, and kept up until it seems as though he couldn't possibly have any breath left in him.

Another peculiar trait which is common to all woodpeckers is their drumming. They will cling to a dead limb for hours and with their long bills tap the resonant wood; this they do with great rapidity, so that the sound is almost continuous. Then stopping for an instant, they will turn their heads to one side, as if listening for an answer; and

not hearing it, will resume their drumming with more vim than ever. Just why they do this is a mystery. Perhaps they do it for exercise, to keep the muscles of the neck limber, or possibly they may have a telegraphic code among themselves, and use this method of conveying their opinions to their neighbors. At any rate it can be heard a long way off, and it is a sound welcomed by all farmers in the spring, as it is considered by them as a sure indication that spring is near at hand.

When feeding in a tree, the flicker always commences at the bottom and works his way to the top of the trees by a series of

jumps, clinging to the trunk with his claws, together with the assistance of his tail, the feathers of which are pointed at the end, and the quills sharp and strong, for this purpose. After having reached the end of a limb, he will proceed to another, and endeavor to capture any worms or bugs which may be concealed under the bark. While they migrate to a certain extent, they are often a resident wherever found, except in the extreme north. They are one of the greatest benefactors of the human, and enemies to the insect race, which we have, and are worthy of the greatest protection.

Albinos.

There has been an unusual number of these curious freaks of nature reported this season in this section of the country. We have positive records of three white-grey squirrels, two red squirrels, one raccoon, one mink, a red-winged blackbird, and a purple grackle; also a number of English sparrows, white, or nearly so, are seen about the city. Several parties also have reported that a handsome, clear-white doe was seen last month near Hudson, Mass. Can any of our readers inform us of others from other sections?

Enough to Make Summer.

Three Baby Swallows in a Chilly Nest in Rochdale.

ROCHDALE, Dec. 6.—A nest containing three young swallows was found in the wood-shed of Andrew Howarth & Sons' mill this afternoon by George Miller, who goes to this building often, as his work requires him to do.

He has noticed the same bird flying around the shed several times, and this afternoon he discovered the nest with the three little birds.

It is thought that the young birds cannot live, owing to the cold weather.—*The Telegram*.

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The Condor for 1901.

*An Illustrated 24-page, Bi-Monthly
Journal of Pacific Coast Ornithology*

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With its January issue THE CONDOR begins its third volume. It will, as heretofore, present in attractive form all the latest and freshest western bird news. The two volumes thus far completed should prove a sufficient guarantee for the style and contents of Volume III.

Have you seen the November-December number which completed Volume II? It contains several notable illustrations, among them being the nest and eggs of Clarke's Nutcracker; the first published photograph of the egg of the California Condor in its original nesting site, together with a descriptive article by the collector; "Nesting of the Dusky Poorwill" (illustrated): "A Breeding Colony of Tricolored Blackbirds," by Joseph Mailliard; "Three New Races of Pacific Coast Birds," by Joseph Grinnell; "The Birds of Mt. St. Helena," by Walter K. Fisher; and shorter articles by Lyman Belding, F. S. Daggett, Ernest Adams and other well known contributors. A sample copy of this 28-page number on application

Address all requests for sample copies, subscriptions and communications to

C. Barlow, Editor and Business Manager, Santa Clara, Cal.

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PACIFIC COAST AVIFAUNA No. 1, "Birds of the Kotzebue Sound Region, Alaska," by Joseph Grinnell, 80 pages, 75 cents.



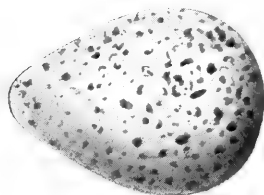
Vol. I.

February, 1901.

No. 2



SEMI-PALMATED PLOVER.



SEMI-PALMATED PLOVER.**A. O. V. No. 274.***(Aegialitis semipalmata.)***RANGE.**

The whole of North and South America, breeding in both the Arctic and Antarctic regions. It migrates in winter to the Bahamas and Brazil.

DESCRIPTION.

Length, 6 inches; extent of wings, 15.5 inches; tail, 2.25 inches; eye, brown; bill, black at tip, yellow at base; legs and feet, flesh color; feet webbed only to second joint.

Adult.—Back, wings, tail and back of head grayish brown; white bar across the wings; forehead, throat, spot under the eye, and ring around the neck, white. Ring around the neck below the white one, band across the crown, line beneath the eye and across the base of bill, black.

NEST AND EGGS.

This plover breeds from northern United States, northward. The nest is simply a cavity in the ground, lined with dry grasses. The eggs, two to four in number, are deposited during the latter part of June. The eggs are of yellowish ash color, spotted and blotched with varying shades of brown.

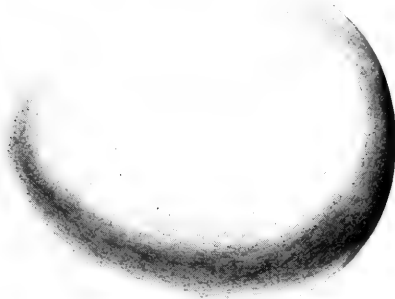
HABITS.

The Semi-palmated or Ring-necked Plover, as it is sometimes called, is one of our common shore birds during the spring and fall migration. It is a shy bird, but generally tries to escape by running rather than by flying. It delights in the shady shores, especially those containing shallow pools of water, and can usually be seen running hither and thither close to the water's edge. Its note is a single sharp whistle, repeated at intervals; this is only uttered when it is disturbed.

It reaches its breeding grounds in the north about the middle of May. It is very wary during the nesting season, and if disturbed will run several yards from the nest before being discovered. If surprised on the nest, it will use the same tactics employed by many other birds, those of feigning injury. The young are very small, mottled gray and white, and being just the color of the pebbles which surround the nest, are almost impossible to find.



GREAT HORNED OWL.



GREAT HORNED OWL,**A. O. U. No. 375.****(*Bubo virginianus*.)****RANGE.**

Whole of eastern North America from Labrador to Mexico, being a resident wherever found except in the extreme north.

DESCRIPTION.

Length, male, twenty-one inches; extent, forty inches; tail, eight inches. Female, length, twenty-three inches; extent, fifty-one inches; tail, nine inches. Bill and claws strong and well curved. Color, above, including wings and tail, very dark brown, the feathers being mottled, and barred with white and rufous, the barring being heavier on the wings and tail. Ear tufts are dark brown, almost a black, edged with rufous on the inner margin. The face is rufous strongly marked with black, the feathers being lightest nearest the eyes. There is a large patch of white across the throat and upper part of the breast.

NEST AND EGGS.

The horned owl breeds from the latter part of January to the end of April, according to locality, the fact that the weather is extremely cold making little difference. The nest is either in a decayed tree trunk, or formed of sticks and twigs, and lined usually with a few leaves and feathers. The eggs are pure white and from two to four in number.

HABITS.

The great horned owl, also called the "hoot or cat owl," is the largest, strongest and most destructive bird of this family in the United States. It is a nocturnal bird and rarely ventures out in the daylight, unless disturbed and driven from its roosting place, which is generally a large oak or pine tree, where it sits all day as motionless as a sphinx. Its flight is graceful and not unlike that of a hawk, from which it can be distinguished by its large and rounded wings.

Horned owls are frequently taken from the nest when young and kept in captivity for years. They make very unsatisfactory pets, however, as their temper is very variable and they are apt to attack their keeper without provocation of any kind, or any warning on their part, and inflict severe injuries with their powerful talons before he can prepare to defend himself. Not only are these birds ill disposed towards mankind, but they are very unsociable among themselves, the same neigh-

borhood rarely being large enough for more than one pair. Except during the breeding season it is even hardly large enough for one pair, and the male frequently has to make lively use of his wings to escape from his irate spouse, who, being considerably larger and stronger than himself rules the household like a veritable tyrant.

The appetite of a horned owl is amazing, and he has the ability to supply it even in the coldest of weather, as he is very agile and daring. He will frequently enter a hen coop and kill several chickens in a night, devouring only their heads, unless, unusually hungry. His bill of fare includes: turkey, chickens, doves, geese, ducks, grouse, quail, woodcock, mice, rabbits, squirrels, skunks, woodchucks, fish, etc. He is the greatest enemy the game birds have to contend with, his sight being so keen and his voracity so great that few can escape. He frequents heavy timbered woods, generally near some water.

On a still night the owl's note is often heard, "Hoo—hoo—Tohoo—are—you?" It is a dismal sound, well calculated to cause terror in the heart of any camper who may be unfortunate enough to be superstitious. They can so modulate their tone that while they are really very near, it sounds as though the cry came from a long distance away.

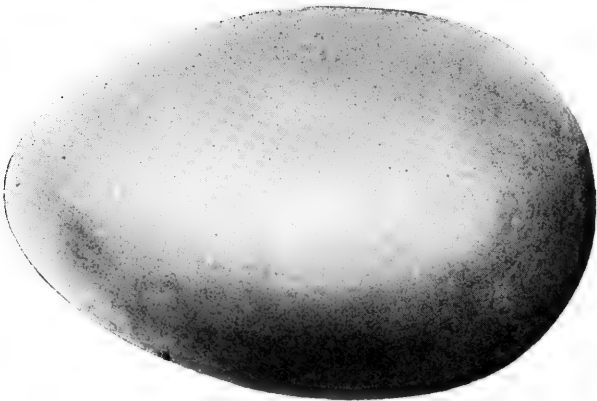
Their breeding places vary greatly in different parts of the

country. When possible, they will choose a hollow trunk or limb for their building site, but when such places are scarce they will use the old nests of hawks or crows, which they remodel for their own use, adding a few twigs and feathers. In places where large trees are scarce they will nest on a rocky cliff or even on the ground. The ground about the nest is often covered with remains of birds and animals that they have destroyed. While very destructive to poultry and game birds, in some localities they are of great benefit to the farmers. For instance, in the West they feed almost wholly on rabbits, which otherwise would totally ruin the crops. They show a preference for this meat, and where hares are abundant will seldom molest poultry. The number of rats and other rodents that they destroy, render them of value in many localities. Thus the horned owl, like many other birds, has his redeeming qualities.

A man from Grafton, Mass., brought a Great Horned Owl to our office a few days ago. It was captured by his bird-dog. He says that his dog brought the bird home and dropped it at his feet, wagging his tail in evident delight. Unless the dog caught the owl unawares and killed him instantly, he must have had a very lively time before he conquered. The bird was fat and evidently in good health.



AMERICAN EIDER.



AMERICAN EIDER DUCK.**A. O. U. No. 160.***(Somateria dresseri.)***RANGE.**

North America, on the Atlantic coast, from the Middle States to Labrador. Very rarely in the great lakes.

DESCRIPTION.

Length, 22 inches; extent of wing, 40 inches; tail, 3.5 inches; eye, dark brown; bill, legs and feet, olive green.

Male.—General color above, pure white; top of head, black, divided by a band of white on back of head; throat, neck and sides of head white tinged with green on back of neck and side of head; breast, white shading into buff or pink; under parts and tail, black.

Female.—Brown above, mottled with black. Head and neck streaked with black. Two dull white wing bars; under parts, light brown barred with black; chest more rufous.

NEST AND EGGS.

Nest made of dry grass and seaweed, lined with down from the breast of the female.

Eggs.—Laid about the middle of June, six to ten in number, of a greenish drab color.

HABITS.

This is one of the largest of the ducks, and also one of the most conspicuous, because of the great contrast produced by the white back and black breast.

He is essentially a sea-bird, and a flock of male birds seated on the water can be seen a long way off. He is excelled by none in diving, and lives upon shell-fish, which he gets from the bottom of the sea. Upon land, few birds are as awkward as the eider, with his peculiar, stumbling waddle.

Its flight is quite rapid, although laborious, as its body is quite heavy, and it is obliged to move its wings rapidly in order

to sustain it. Sometimes it attempts to imitate the gulls and terns which are common in their locality, and tries to sail with set wings. The attempt can hardly be called successful, as gravity soon overcomes the buoyancy of his wings, and he must of necessity work them again.

During the winter the birds generally live in large flocks in the open sea. They are quite timid at this time, and, if disturbed, they rise from the water, and in Indian file fly to a more congenial locality. When spring comes they mate, and in pairs swim to land. They waddle about until

the female finds a suitable protected spot, and there she constructs her nest, which she lines with down from her own breast. As soon as the eggs are laid, the male deserts his mate and betakes himself to sea again, where in company with other grass-widowers, they remain until after molting.

These nests furnish the eider-down of commerce. About twenty-five of the nests will yield a pound of down. The eggs are also taken, as they are very good for food. The duck lays a second set, after having had the first stolen; that is not disturbed, as the fishermen know that to do so, would soon cut off the supply of down and their revenue.

The female is not timid when sitting on her eggs, and you can approach quite near; indeed, I have seen it stated that they will allow themselves to be stroked with the hand. As soon as hatched, the young are led to the water, in which they immediately plunge and proceed to swim about like veterans.

We have received a number of interesting articles in our competition, the first one of which closes Feb. 1. The article we deem the best will be published in the March number. There is no better way for one to study the birds than to write about them.

It necessitates the studying of their habits from life.

For the March contest we offer the same as last month—\$3 for the best article under 300 words, on bird life.

We will give \$2 for the best photograph of birds from life, or photo of their nest, received between Feb. 1 and March 1.

Manuscript not accepted will be returned if postage is sent for same.

Acting upon the suggestion of several of our subscribers, we are having prepared a color chart, on which all the colors that we shall use in describing the birds will be illustrated and named. We are also preparing a chart showing the different parts of a bird. These will probably appear in the April number.

In connection with the American Eider, presented in this issue, it may be interesting to note that the pair of birds from which the illustration is made, are now resting in their native element in the North Atlantic. They were aboard the "Miranda" which carried the Cook expedition in July, 1894. The steamer struck an iceberg and sank, off the coast of Greenland. A Snowy Owl met a like fate at the same time.



RUBY-THROATED HUMMING-BIRD.



RUBY-THROATED HUMMING-BIRD.*A. O. V. No. 428.**(Trochilus colubis.)***RANGE.**

In Summer.—The whole of eastern North America east of the Mississippi, and as far north as southern Canada.

In Winter.—Southern Florida and the West Indies to Panama.

DESCRIPTION.

Length, 3.25 inches; extent of wing, 5 inches; tail, 1.25 inches; eyes, brown; feet, very small.

Male.—Entire upper parts, metallic green; throat, brilliant metallic crimson; tail, black, changing to a purplish color in certain lights; tail feathers all narrow and pointed, and tail forked; sides of body, greenish; below, white.

Female.—Upper part same as male; no crimson on the throat; tail rounded and outer three feathers broadly tipped with white.

NEST AND EGGS.

The nest is always placed on top of a branch, sometimes in vines, apple or pear trees, but more often in an oak or chestnut tree in the woods. It is a beautiful, cup-shaped structure, composed of downy fibres, and covered with lichens, which are fastened on with the saliva of the bird. The eggs, which are laid from the last of May to the latter part of June, are two in number, white, and equally rounded at both ends.

HABITS.

The humming-birds are one of the most numerous of all species of birds. They are an American bird, and about four hundred varieties are found on the two continents. They are literally gems, cut and polished, among the other birds. The throats, and on some varieties the tops of the heads, give forth all the fire of the ruby, emerald, sapphire and opal. These little birds range in size from a tiny creature two and one-quarter inches to one

over eight inches in length, or nearly as large as a robin.

The ruby-throat is the only one of the number of humming-birds found in the United States that lives east of the Mississippi river. It is known and admired by every one who is so fortunate as to have a flower garden, or who takes a morning walk when the apple trees are in full bloom. It is not at all timid, and unmindful of your presence will dart here and there after its food, which does

not consist principally of honey, as is generally supposed, but mostly of spiders, flies and small bugs. With wings vibrating with a rapidity that renders them invisible, the bird hovers over each successive blossom, and with its slender bill and sensitive tongue, captures any insects that may be concealed therein.

Possibly during your rambles in the woods, you may hear a squeaky chattering, and a sound not unlike that of a bumble-bee buzzing; if you do, you can be sure, that you are very near the home of the bird we are studying, and that he is trying his best to drive you away. If you are keen-sighted and can follow him as he passes in his bullet-like flight, you will soon see him alight on a twig. The nest is only a few feet from him, you may be certain, and if you search carefully you will find it perched on a horizontal limb and so covered with moss that it is hardly distinguishable from the bough on which it is placed.

What a misfortune it often proves to these birds that, after having built their nests so cunningly, they should thus disclose their situation, when if they were to remain quiet they would very rarely be discovered.

But notwithstanding the fact that they frequently bring ruin to their own homes, I do not think they have decreased in numbers in the past few years. We certainly hope they never will, as to lose the

humming-bird would be to lose one of nature's brightest jewels.

THE HUMMING-BIRD.

*A flash of harmless lightning,
A mist of rainbow dyes,
The burnished sunbeams brightening,
From flower to flower he flies:*

While wakes the nodding blossom,
But just too late to see
What lip hath touched her bosom
And drained her nectary.

JOHN B. TABB.

The pertinacity and lack of fear of the Northern Shrike are well shown by the following: As I was sitting at my desk I heard an unusual chattering among the English sparrows outside. I looked out and saw perhaps twenty-five or thirty of them in a circle about one of their number which lay on the ground in the grasp of a shrike or "Butcher-bird." They were all screaming with all their power, and trying to frighten him away. A man passing by stepped into the street and picked up the shrike and brought him into the office. We were obliged to pry his bill apart to make him release the sparrow, which by this time was dead. We liberated the shrike, and he is probably busy now satisfying his appetite with other sparrows.

Earl S. Baxter shot a guillemot at Colebrook River, Litchfield county, Conn., recently. The bird is very rare in this region, being an arctic bird, and, so far as known, this is the first one killed in that section. The bird is jet black on his back and has a black head, but otherwise is pure white.

American Ornithology.

A MAGAZINE DEVOTED WHOLLY
TO BIRDS.

Published monthly by Chas. K. Reed,
75 Thomas Street, Worcester, Mass.,
Edited by C. Albert Reed.

SUBSCRIPTION RATES.

In the United States, Canada and
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Single copies five cents.

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Entered at the Post Office at Worcester, Mass.,
as second-class matter, Jan. 16, 1901.

Probably all are aware of the difficulties that beset a new publication, especially one on birds. Hundreds have started only to give up the struggle in a few months. The reason for this has been that until recently there has been very little interest among the people in regard to bird life.

Our magazine is entirely eifferent from anything hitherto published, in that we propose to give the life history of four or five birds each month, the illustration of the birds being of sufficient size to be of value, and the eggs of each bird illustrated *full size*.

The time is now ripe for just such a publication, owing to the great and increasing interest in nature study, especially in the schools. The time is coming when one of the qualifications required of a school teacher will be to have a fair knowledge of our birds.

Judging from the numerous letters of commendation that we have received, we shall surely have a successful career. Anyone who subscribes to our publication from the start will have a work on North American birds that will be of great value to any library, and will represent an enormous amount of labor, skill and expense.

The March number will contain Screech Owl, Great Crested Flycatcher, Mountain Partridge, Greater Yellow Legs and White Ibis.

The April number will contain: Gambel's Partridge, Long-crested Jay, White-throated Sparrow, Audubon's Warbler and Wood Duck.

Any notes of interest in regard to these birds will be greatly appreciated by the subscribers as well as the editor.

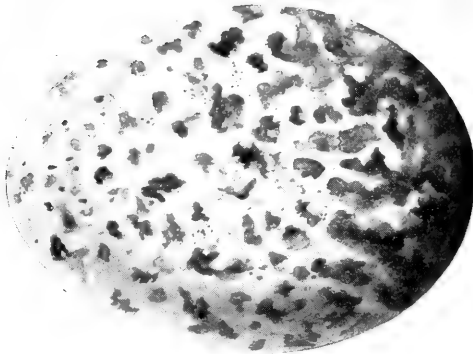
We have received a copy of Vol. I, No. 1, of *The Petrel*, published by J. H. Martin, Palestine, Ore. It is an attractive appearing magazine and contains interesting matter. We wish it success.

We note a great improvement in the January number of *The Bittern*, in the size, print, paper, and general appearance. The publisher, G. M. Hathorn, Cedar Rapids, Iowa, has our congratulations.

Bird Lore, *The Osprey* and *The Condor*, copies of which we have received, still maintain their high standard of excellence.



AMERICAN OSPREY.



AMERICAN OSPREY*A. O. U. No. 364.**(Pandion haliaetus carolinensis.)***RANGE.**

North America, from Hudson bay and Alaska to the West Indies and northern South America.

DESCRIPTION.

Length, about 25 inches; extent of wings, from 50 to 56 inches; tail, 9.5 inches.

Adult, Male and Female.—General color above, dark brown; under side of wing, white, barred with brown; top of head, brown, mottled with white bases to the feathers, which are pointed at the tips. A broad white streak extends from behind the eye down to the side of the neck; remainder of head and under parts, white; tail above, light brown, barred with dark; bill, black; feet, bluish gray; eyes yellow.

Young.—Similar to adult, except that the feathers of the back are edged with white, and the back of head is whiter.

NEST AND EGGS.

The nest is generally placed in the top of a dead tree and is a very cumbersome affair, being built of large sticks, twigs, and sea-weed. In localities where trees are scarce, the ospreys nest on the ground, or on cliffs and ledges.

In Florida, nesting commences about the first of February; in California, early in April; in New England, in May and June.

The eggs are from two to four in number; the ground color is creamy white, thickly blotched and spotted with various shades of brown. These markings vary greatly in size and amount, and in some cases completely obscure the ground color.

HABITS.

The American osprey, sea-eagle, any day, circling slowly up the or fish-hawk, as it is commonly creek or river in search of his called, is one of the best known of food, which, as his name implies, American birds. He comes from consists wholly of fish. After his winter quarters in the south wheeling about for a short time at the latter part of March, and his a height of perhaps 60 to 75 feet coming is regarded by seafaring above the water, his vigilance is people as a sign that winter is rewarded, and he sees a finny creature near the surface. Pois-

He is never found far from ing himself for an instant, he water, and can be observed almost closes his wings and darts down-

ward like an arrow, strikes the water with a splash, that on a still day may be heard half a mile away, disappears for a second, then rises with a wriggling fish in his talons. His feet are especially adapted for his purpose, as they are very powerful, and the bottoms of them are very hard and rough to enable him to firmly hold his prey.

His chief enemy is the bald eagle. Not that this bird destroys the osprey or its nests, but he has another use for him. He knows that the fish-hawk is a clever fisherman, and while he himself occasionally goes fishing, he much prefers to rob the osprey of his rightful spoils. The latter, as soon as he sees that he is pursued, endeavors to escape by mounting skyward, meanwhile uttering piercing shrieks. His pursuer relentlessly follows, and, with scarcely a perceptible motion of his wings, rises higher and higher, until the osprey gives in to his superior strength and swiftness and drops his prey.

The osprey uses the same nest year after year, adding a few sticks and more seaweed each season, so that in a few years, it be-

comes an enormous affair, sometimes four or five feet across. The bulkiness of his nest is very forcibly apparent to many would-be collectors. After having climbed to the top of a tree, some 50 or 60 feet high, and braved the attacks of the parent birds (for they are fearless in the protection of their eggs and young), he finds to his dismay that he cannot reach over the nest to get at the eggs, because of its size.

The osprey is not particular about the location of his nest, as long as it is near good fishing grounds. It has been known to build on a chimney-top, also on the cross-piece of a telephone pole. A man in Bristol, R. I. erected in his yard a pole about 30 feet high, and placed a platform with a few scattered sticks on it at the top. The following year a pair of fish-hawks occupied it and have continued to for several years since.

It is protected by law in a number of states, and its tremulous, piercing whistle may be heard at all hours of the day. The fishermen regard it kindly, and will not allow its nest to be disturbed if they can prevent it.

THE OSPREY.

Soon as the sun, great ruler of the year,
Bends to our northern clime its bright career,
And from the caves of ocean calls from sleep,
The finny shoals and myriads of the deep;
When freezing tempests back to Greenland ride,
And day and night the equal hours divide;
True to the season, o'er our sea-beat shore,
The sailing osprey high is seen to soar,
With broad, unmoving wing, and circling slow,
Marks each loose straggler in the deep below;
Sweeps down like lightning; plunges with a roar,
And bears his struggling victim to the shore.

ALEXANDER WILSON

Catching a Tartar.

I wonder how many readers of AMERICAN ORNITHOLOGY ever caught a bird when it was asleep. I caught one once to my sorrow and to the great enjoyment of several companions who were with me. Of course there are different kinds of birds, some large, others small, some weak, others strong; the one I happened to get hold of was rather powerfnl.

Well, it was this way. A party of us were camping out on Merritt's island in Florida. Not far from us, across the Banana river, was a long, sandy point on which hundreds of sea-birds roosted every night. One evening one of the party proposed going over to the point to see and hear the birds rise. No sooner said than done. So we started across in our canoe. As the craft grounded on the beach, large numbers of terns and gulls arose and circled around us with shrill cries of alarm. As we continued up the beach the birds continued to rise until there were thousands of them. Ahead I saw what I supposed was a stump, but as I drew near, it gradually assumed the form of a bird. "Ah!" I said to myself, "a brown pelican asleep. He must be deaf; guess I'll surprise him." Well, I surprised him, and incidentally he surprised me too. Without thinking of possible results, I reached down and grasped him by the neck. Well, for about a minute I wasn't sure whether it was a cloudburst,

a cyclone or a sandstorm of the desert, such as you read about, that had happened, but gradually my mind cleared and I was sure it was a threshing machine in full operation that I had caught. I held on to his neck with one hand while I tried in vain with the other to catch those flopping wings or his revolving legs. Well, after a while my companions, who had all this time been doubled up with laughter, came to my relief and tied the pelican's legs together, and after I had picked myself up, brushed the sand out of my eyes, nose and mouth, and given my clothes a good shaking, we carried my trophy back to camp. Every day while we kept the bird, I had an invitation to come out and give the show over again; an invitation that I always declined with thanks.

A Camper.

Spare the Birds.

On a recent visit to Florida we learned that the slaughter of birds there for millinery purposes is greater this winter than ever before. Gulls and Terns are hunted for their wings and Pelicans and Eagles for the large quill feathers now so freely worn in ladies' hats. The beautiful Egrets are so nearly extinct that the hunters get \$16 per ounce for Egret plumes. The Bald Eagle, our national Emblem, will be next to disappear. What a pity to lose this picturesque bird that does no harm to man or beast, as it lives almost wholly upon worthless fish, such as mullet and menhaden.

"The Warbler."

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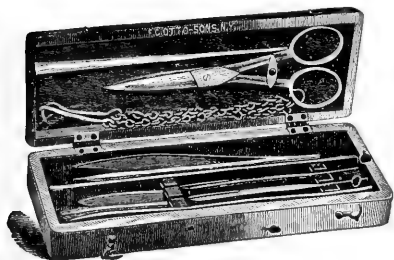
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Vol. I.

March 1901.

No. 3

GREATER YELLOW LEGS.

A. O. V. No. 254.

(Totanus melanoleucus.)

RANGE.

North America generally; breeding from northern United States northward to Labrador. Migrates in winter to Chili and the Argentine Republic.

DESCRIPTION.

Length, 14 inches; extent of wings, 25 inches; tail, 3 inches; bill slender, black, and about 2.25 inches long; eyes brown; legs long and slender, yellow. Upper parts grayish brown spotted with white and black. Rump and tail white, the latter barred with brown. Throat and under parts white, streaked with black on breast, head and neck.

NEST AND EGGS.

The nest is simply a slight depression in the ground lined with grasses. The eggs are three to four in number, grayish buff, blotched with varying shades of brown.

HABITS.

The Greater Yellow-legs, Tell-tale, or Winter Yellow-legs is rather a common shore bird during migrations; which occur during early May and August.

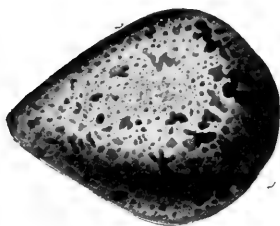
When flying or on the ground, they continually utter a shrill whistle from which they get their name, "Tell-tale."

They are sociable, and travel together in quite large flocks. They can be called easily by imitating their whistle.

They are well known to sportsmen, and also to the opposite class, I mean those individuals whose sole aim in life seems to be to see how great a number of birds they



GREATER YELLOW-LEGS.



can slaughter in a day. These birds furnish an easy mark for this class.

These men set out a number of decoys on some favorite marsh, then conceal themselves in a blind, covered with marsh grass. When a flock of Yellow-legs is heard, they attract their attention by imitating their call. The birds see the decoys, and executing a wide circle, they come up over them, hover for an instant with their long legs hanging downward preparatory for alighting, and—well, suffice it to say that several of them never see their home again, and another sportsman (?) goes home to brag about his skill.

After alighting on the beach, these birds have a habit common to several others of their species, of raising their wings high over their head before folding them. They feed on shell-fish, worms and insects, and may frequently be

seen wading in a pool of water several inches deep, in quest of food.

When alarmed, their flight is generally swift and quite erratic, and it is quite amusing to watch them as with their long neck and bill extended before them, and their long legs hanging behind, they double and turn in their haste to escape.

Their eggs are occasionally found in the central part of the United States, and a few may breed in the marshes in the north-western United States, but the greater number pass on to Labrador.

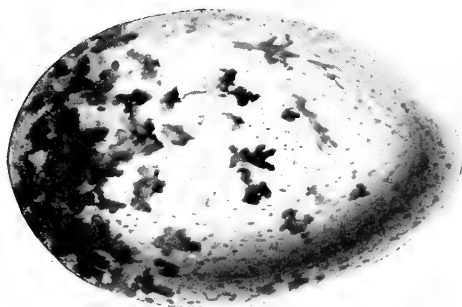
With their confiding nature in allowing themselves to be so easily decoyed, they would long ago have been exterminated but for the fact that they do not tarry long in one place, but hasten on to their breeding ground, where they are not persecuted.



GROUP OF WADERS



WHITE IBIS.



WHITE IBIS.*A. O. U. No. 184.**(Guara alba.)***RANGE.**

South Atlantic and Gulf States, southward to the West Indies, and northern South America. Rarely on the Atlantic coast as far north as Long Island.

DESCRIPTION.

Length, 24 inches; extent of wings, 38 inches; tail, 4 inches; legs, orange or red; eye, blue. Bill, head and throat, which are devoid of feathers, orange or red. Entire upper and under parts, pure white. Tips of primaries, glossy black.

NEST AND EGGS.

These birds live together in large colonies, hundreds and sometimes thousands breeding in the same marshes. The nest is composed of closely woven reeds, and is fastened securely to the upright reeds in the marsh. They also breed abundantly in the low bushes on the islands of the Gulf coast. The eggs, two or three in number, are of an ashy color, spotted and blotched with brown and reddish brown of different shades.

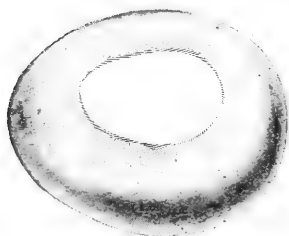
HABITS.

The immense colonies of the beautiful waders, formerly numbered by thousands, but now rapidly dwindling away, present a wonderful picture at their breeding grounds. The marsh is literally a white mass, the reeds bending under their heavy burdens. and rivers. They are wild and quite difficult to approach. When alarmed they take flight in great confusion, rising in every direction. However, they soon restore order, and flying side by side in an unbroken line, they move off. They feed on small fish, mollusks, crickets and other small insects, frogs, etc.





SCREECH OWL.



SCREECH OWL.**A. O. V. No. 373.***(Megascops asio).***RANGE.**

Eastern United States, from southern Canada to southern Georgia. It is a resident and breeds wherever found.

DESCRIPTION.

Length, 9 inches; extent of wings, 22 inches; tail, 3.25 inches; eye yellow; bill, grayish; feet, feathered; ear-tufts, conspicuous. Subject to two distinct variations in color, the red and the gray, the markings in either phase being the same. Under parts mottled with either rufous or gray, and black. Below, mottled with the same colors, the black taking the form of bars crossed by numerous streaks.

NEST AND EGGS.

The nesting site is nearly always in a natural cavity or a deserted wood-pecker's hole, varying in height from 4 to 50 feet from the ground. The eggs are laid in the bottom of the cavity on the bits of dead wood, and possibly a few dry leaves that have accumulated there. In the southern part of its range, the eggs are laid the latter part of March, while in New England and the northern states, they are laid about the middle of April. Usually four, five or six eggs are laid. They are white, fairly smooth and a little glossy.

HABITS.

The Screech Owl is readily identified, being the only one of the very small owls having ear-tufts. This is the most common and best known of our owls, although to the majority of the uninitiated it is only a "cat owl," as are all others that have ear-tufts. It is not known what causes the difference in coloration of these birds. It is not due to difference in the sex, or to age, as young birds are often found in the same nest showing both phases of color when the parents are both the same color.

An old orchard is the favorite haunt of these birds. They prefer an apple tree to any other for

their nesting site, although when nesting in the woods, they generally use an oak. After incubation has commenced, both birds may generally be found on the nest together. I have found both parents and five young in a hole which appeared to be hardly large enough for one.

Their note is not a screech by any means, and although at times is a very mournful, uncanny sound, at others it is a not disagreeable trill. The screech owl is a very sociable bird, and is easily tamed, especially if taken when young.

What a queer little bird the young screech owl is, with his

bright, yellow eyes peering out at you from the mass of fluffy, grayish down that envelopes him from head to foot. How defiantly he snaps his bill at you if annoyed. He seems to say: "I'm small, but take care."

An experience of the Worcester Natural History Society shows that they are very affectionate towards each other sometimes, but I think this case was an exception. The society came into possession of a pair of screech owls and placed them together in a room. The next morning, on entering the room to feed them, the most conspicuous objects were a solitary owl, and on the floor, a bunch of feathers, which anyone at all versed in ornithology would at once pronounce those of *Megascops asio*. The remaining owl did not appear to be very near the point of starvation. In all probability, at some prior date, they had both been suitors for the hand of the same owless, and at this time had a good opportunity to settle old scores.

Speaking of screech owls always carries my thoughts back to my early school days. In the corner of a yard in Barrington, R. I., stood one of the largest elms that I ever saw. It had numerous decayed limbs which each year furnished homes for four or five pairs of screech owls. At all hours of the day, one or more heads could be seen at the openings. These birds were doubly secure, as the nests were between forty and fifty feet from the ground, and the owner of the place had very

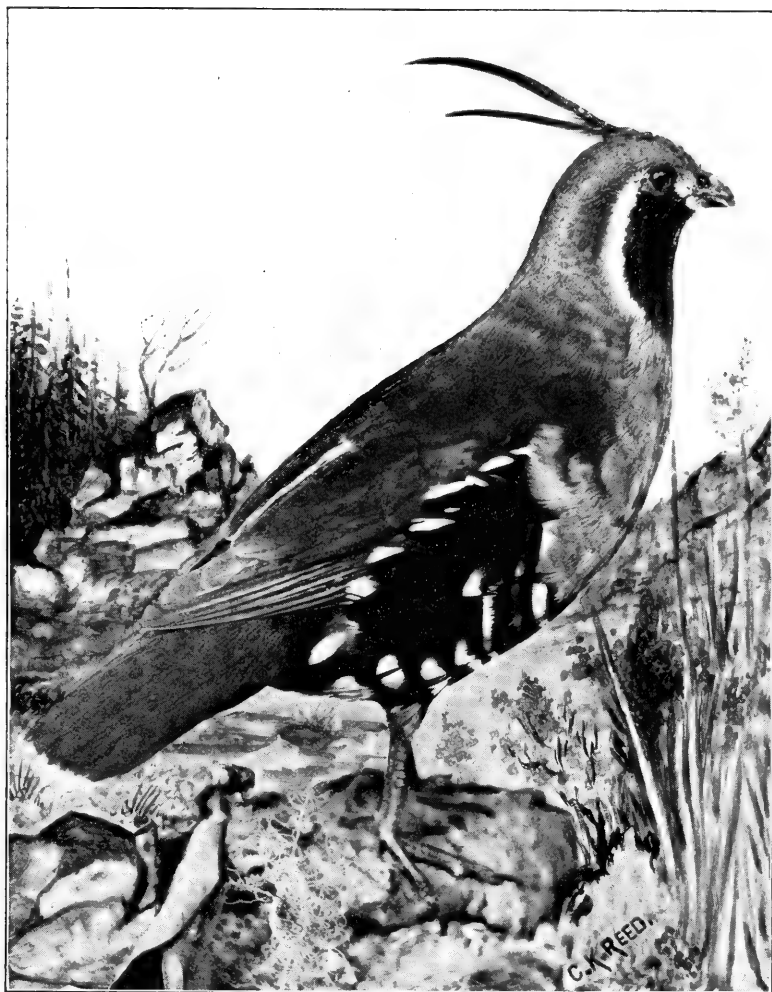
strong objections, as any sensible farmer should, to the disturbance of his owls.

The little screech owls are very useful in destroying rats or mice, and they frequently take up their abode in old barns or pigeon houses, and I might add that soon after, the mice take their departure.

These little feathered mousers are very light and active, and fly swiftly about without a perceptible sound. You can imagine the surprise and horror of a mouse, engaged in his midnight search for edibles, to suddenly find himself grasped by eight small, sharp talons, and conveyed to a convenient beam (for the owl). What follows may interest the reader, but the mouse is probably beyond any further concern in the matter. Slowly, and with the deliberation that always attends an owl's movements when not in the pursuit of prey, he proceeds to swallow the mouse, head foremost. Six or eight hours later a small ball of fur, all that remains of the poor little mouse, will be ejected from the owl's mouth.

They also eat large numbers of grass-hoppers and insects. English sparrows prove a very acceptable article of diet, as do other small birds occasionally.

Now there are many persons who never notice good deeds, no matter how numerous, but let a single fault present itself and they will condemn the perpetrator forever. While the screech owl has his faults, he has good traits to counterbalance them many times over.



MOUNTAIN PARTRIDGE.



MOUNTAIN PARTRIDGE.**A. O. U. No. 292.****(*Oreortyx pictus*.)****RANGE.**

The Pacific coast of the United States from middle California through Oregon and Washington. It is a resident where found.

DESCRIPTION.

Length, 10 inches; extent of wings, 16 inches; tail, 3.5 inches; eye, brown; feet, brown. Adult, upper parts and wings olive brown, top of head, neck and breast, slate color; throat, chestnut bordered with line of black; white extending from base of bill over the eye and down the sides of the neck; sides, chestnut barred with black and white; belly, white; under-tail coverts, black.

NEST AND EGGS.

The nest of this partridge is usually placed in a clump of weeds, grass, or more often of ferns, well concealed from view, and is composed of the above-named materials. Their usual site is near an opening in the woods, or near the edge of timber, usually in thick wooded fields, rarely in an open place. The eggs, generally from eight to twelve in number, are usually deposited from the latter part of May to the middle of June. The eggs vary in color from a pale cream to a rich buff color, and are unspotted.

HABITS.

This large, handsome partridge is only found near the coast line, and while quite common in some localities, is not seen so often by the casual observer, as they run quite a ways before flying.

Their food consists of insects and seeds of various kinds. They never refuse grain if it is obtainable.

Its flesh is very good to eat, and large numbers are shot by sportsmen, while more are trapped and snared for market. Their habit of running a distance before flying often prevents their destruction, as neither the man nor his

dog can tell when or where they will rise.

Dr. A. G. Prill of Scio, Ore., writes: "This beautiful partridge is abundant in and around the foot-hills of the Cascade mountains in Oregon. I have found them within thirty miles of the summit of these mountains. During the winter months they congregate in large bands, fifteen to fifty birds often being seen together. Their nesting season is the month of June, although sets are found in May and July.

"I believe in many instances two broods are raised in a season.

This occurs most frequently when we have an early, warm spring. I found two sets last year, one on June 15, containing eleven eggs, and the other on June 18, this also containing eleven eggs, but under peculiar circumstances. The last set mentioned contained, besides the eleven partridge eggs, seven

eggs of the ring-necked pheasant. The partridge had possession and was sitting, although not able to cover the eighteen eggs, some of which had spoiled. Incubation was about ten days advanced. What battles were fought over the possession of the eggs and nest can only be imagined."

EAGLE vs. HOUNDS.

I once saw a golden eagle play a real mean trick on a pack of hounds that were after a rabbit. I should like to have a picture of it as it is in my mind's eye. It was one of those mild, calm days in the late fall. The bunch-grass on the side hills, the blue-stem of the hollows, and the light buffalo-grass made the only shading in the scene. There sat the eagle, a half mile distant, looking like a man sitting with his head drawn down close to his shoulders.

The hunters were off on a long slope, out of sight of the eagle. Soon the deep baying of the hounds can be heard in the distance, and here comes Mr. Jack-rabbit, just sailing around the hill, across a long slope covered with buffalo-grass, too short to interfere with his running. The hounds were good ones, big, buff fellows, almost matching the grass in color, and were keeping well up with the rabbit. On they came; the rabbit, as is its custom, seeing nothing in front of it while

running, coming straight for the eagle. When close to it, the eagle rose straight in the air, hovered there a moment till the bewildered jack was under him, then dropped down and seized it as complacently as if he had always got his grub that way. The hounds swung off to one side and circled back to the hunters, who seemed to think that the dogs had lost the trail of the rabbit, and they surely had.

A. K. BOYLES.

Salina, Kansas.

Our Color Chart will be ready for the April number. These charts require twenty-two impressions each and are therefore expensive. We have decided to give these to yearly subscribers only. We would suggest that you bind this sheet in your first number, where it can always be found. It will be an invaluable aid when studying the birds in our magazine or any other bird book. Single copies can be had for ten cents each.



CRESTED FLY-CATCHER.



GREAT-CRESTED FLY-CATCHER.*A. O. U. No. 452.**(Myiarchus crinitus.)***RANGE.**

Eastern United States and southeastern Canada, west to the Mississippi valley, south into Mexico and Central America. They breed throughout their United States range.

DESCRIPTION.

Length, 9 inches; extent of wings, 13 inches; tail, 4 inches; eye, brown; feet, dark; bill, broad, dark at tip, yellowish at base. General color above, olive-gray. The inner webs of the tail feathers (except the two middle ones) are chestnut, as are the outer webs of the primaries. There is a short crest on head. Throat light gray, changing to ashy gray on the breast. Under parts, pale yellow.

NEST AND EGGS.

The nest is always built in a cavity in a tree. They are not particular about the size or shape, and frequently use a deserted woodpecker's nest. The nest is built of grass and straw, and frequently has feathers in addition. A dried-up snake-skin generally enters into the construction. The eggs are laid about the first week in June. They are four or five in number. The ground color is buff, and the markings brown and purple. It is one of the most handsome and strikingly marked eggs that we have.

HABITS.

This fly-catcher has the unenviable reputation of being the noisiest and most quarrelsome of all birds. He certainly does like to hear his own voice, and while perched on his favorite lookout is continually uttering his discordant "waugh," followed by an amusing chuckle or whistle. His note can be heard when far away, and once heard will never be mistaken.

What an odd looking figure he makes as, perched on a dead twig of an apple tree, with tail hanging straight down, he constantly turns

his head up, down and sidewise, looking for any insect that may pass his way. Seeing one he dashes after it, catches it and quickly returns to the same twig, and is on the lookout for the next victim.

His greatest delight is in tormenting smaller birds. As soon as he perceives one of the latter, he is after him, and snapping his broad bill chases the poor bird over and under branches and around trees, until he leaves his territory. How proudly he returns to his point of

vantage, and he sits so erect it really seems as though he were about to fall backward as he gives voice to his peculiar cackle.

Like most human bullies, this bird is at heart a coward, and the least show of resistance will send him back to his lookout with the meekest air imaginable.

That the snake-skin which is placed in their nest is not put there by chance, is shown by the fact that it is found in about three-quarters of the nests of this bird. This habit is also followed by several other birds, although to a less extent. The only explanation that can be advanced for this habit is that it may afford some protection from squirrels, jays and crows,

who, having a great liking for eggs, may imagine that a snake is coiled up in the nest and leave it alone.

The Legend of "Myiarchus Crinitus."

Who has not heard the loud voice and emphatic notes of the king fly-catcher of the forest? Perhaps you were familiar with his song many years before you were able to name this ever-present companion of your boyhood fishing excursions. It is he who mounts that tall, dead tree growing by the water's edge, and unhesitatingly announces to the world that he is "lord of the woodlands." He launches himself into the air, and snapping up some unfortunate insect, immediately returns to his lofty perch.



NEST AND EGGS OF CRESTED FLY-CATCHER.

Away down in perhaps this same tree is an old hole or natural cavity. In this odd but comparatively safe place, he builds his queer little home—so different from those of his cousins, the smaller fly-catchers. With his nest-building is linked a curious habit—a habit indulged in by his forefathers from the early ages, and which in all probability will be connected with the life-histories of his progeny in centuries to come. No well-regulated family of crested fly-catchers will set up housekeeping without a snake skin—an old, cast-off snake-skin, which it places in its nest in much the same way that we would place a horseshoe over our doorway, and perhaps for the same purpose.

Ornithologists can not agree on the object for this odd but established custom of *Myiarchus crinitus*—whether he uses it as a scarecrow for the benefit of inquisitive squirrels, or whether it is his own particular idea of ornamental beauty.

THE LEGEND.

And it is written that Noah in the last days took within the ark of safety, of all animals, a male and a female of each kind, and of all birds a male and a female of each kind, that *all* might not be destroyed, but that each kind might be perpetuated on the face of the earth.

As *Myiarchus* (great crested fly-catcher), with his heart full of mischief, noted the arrival of each pair

of birds, he noisily commended his friends or strenuously objected to his enemies until, to avoid further annoyance, he and his mate were taken inside.

Now it so happened that *Myiarchus* and his wife *Crinitus* were the *first* of all living creatures to enter the much-talked-of-haven of safety, while *Pelias* and his wife *Berus*, the serpents, were the *last* of all animals to gain admission.

Myiarchus was well pleased with this distinction, and being of an egotistical nature, utterly overlooked the motive that placed him first on the list.

Said *Archus* to his wife: "*Crinitus*, dost thou observe of how much greater value and importance are we than those lowly ones who follow us? We shall demand separate quarters and shall hold aloof from all other birds. And—mark thou, *Crinitus*—that *Contopus*, *Sayornis*, *Milvulus* and *Acadicus* are only poor relation and must be taught their proper places. Use caution and judgement, however, when thou art in the presence of Cousin *Tyrannus*. He has a vile temper and will surely resent any inference that he is not the real king bird. All others do thou completely ignore. Deignest thou not to look upon them." And growing more conceited as the ark continued its journey, *Myiarchus* became abusive of all birds and animals alike, and his vain boastings and self-praise became unendurable.

And Noah, the keeper, overheard him say to the serpent: "Pelias, thou loathsome and detestable creature, how gainest thou admission in *my presence*? Because thou layest eggs, thou feelest exalted—thou who canst but bore an ugly hole for a nest. Wouldst thou be a bird? Ha! where art thy wings? Oh! thy ugly spotted skin"—but no more could he say, for Noah interrupted him.

"Myiarchus, thou vain and conceited creature, the same God gavest *all* life alike. Were I not commanded to deliver thee safely, thou shouldst surely die for thy wicked boasting. A curse shall follow thee all the days of thy life; thou and thy sons, and thy sons' sons. Thou and thy family Tyrannidae are kings of nest-builders, but *thou* shalt lose thy talent. Henceforth *thy* home shall be a dark and ugly hole. Thy round and well-built nest shall henceforth be a heap of trash, and thine immaculate eggs, of which thou art so proud, shall be marked with bloody, wriggling serpents. So desolate thy home shalt be that thou thinkest the ugly spotted *serpent-skin* an adornment upon thy walls, and ever shall it serve to remind thee of thy wickedness."

ISAAC E. HESS.

Philo, Ill.

A SUMMER'S-DAY RE-COLLECTION.

My favorite haunt during the warm summer days was a beauti-

ful bit of woods near a small creek. After following the many windings in and out among the rocks and trees, the creek gradually widens, forming a diminutive pond. On both sides of this pond are small knolls covered with emerald grass and studded with gigantic oak trees, which invite the wanderer to retire in the cool shade, away from the burning heat of the sun. The banks are the homes of numerous gophers, who notify us of their whereabouts by their peculiar chuckling noise. During this time of the year we may see the dab-chick, or, as he is more often called, hell-diver, performing his aquatic feats on the pond. Nothing can be more magnificent than to observe the numerous warblers as they hop about among the limbs of the great oak trees or fly about searching for food, which at this time affords ample supply for their hungry stomachs. It is here that I heard for the first time the sweet song of the hermit thrush, our sweetest American singer. He was concealed among the small shrubbery near the lower end of the pond, and it took me quite a time to find the author of this sweet strain. Near this lower end where the pond joins the brook, is a ford made of stones just protruding above the surface, where the mud-turtle enjoys a bath in the hot sun and spends a good part of his short life.

A place like this must be seen to be appreciated, but every lover of nature can see from the above why I am drawn to this peculiar spot more than any other.

H. E. NEUMANN.

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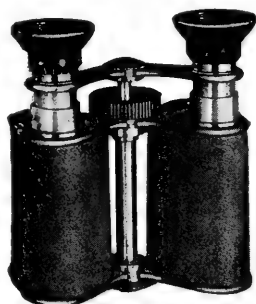
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Vol. I.

April, 1901.

No. 4

WOOD DUCK.

A. O. V. No. 144.

(Aex sponsa.)

RANGE.

From Hudson Bay to Gulf of Mexico, and from the Atlantic to the Pacific. They breed practically throughout their range.

DESCRIPTION.

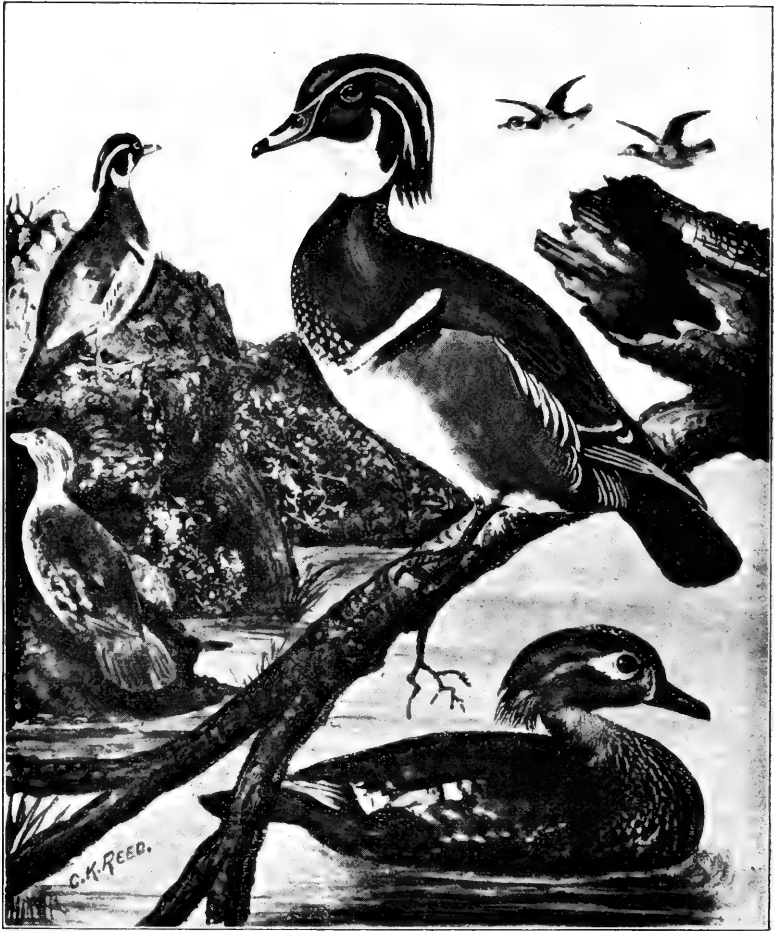
Male.—Length, 18 inches; extent, 28 inches; tail 4.5 inches. Bill.—Tip black; oblong spot of white between nostril and lip; remainder purplish red, changing to scarlet back of nostril, and outlined at the base with yellow. Legs and feet, olive yellow; webs dusky. Eyelid and eye, red.

Forehead and crest, green and purple metallic hues. A white line extends from bill, over eye to end of crest; also one from back of eye to base of crest. Cheeks, violet and purple. Side and back of neck, violet green, as is also the back and tail. The white on throat extends, in a crescent, across base of neck and also back of cheek to the eye.

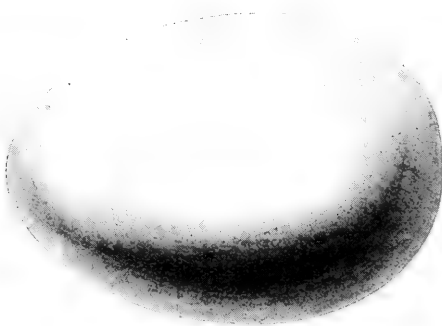
Wings chiefly black with metallic greenish reflections. Outer webs of primaries white. Ends of secondaries tipped with white. Breast purplish chestnut, this color extending nearly to the back of the neck.

Breast dotted with V shaped white spots which grow larger as they approach the belly. There is a crescent of white, bordered by black on the lower side, extending across the shoulder. Sides buffy, crossed by fine wavy black lines, the feathers on the upper and outer edges being edged with a broad band of black and white. On each side of the rump is a patch of purple excepting the last three or four feathers which are orange.

Female.—Length, 17 inches; extent, 26 inches. Legs, a yellowish brown. Eyelids, yellow. Eye, reddish brown. Forehead, space about the eye and throat, white. Head, crest, rump, back, and tail brownish



WOOD DUCK.



glossed slightly with metallic green. Wings, brown, the secondaries being broadly tipped with white and crossed by a broad band of metallic green, separated from the white tips by black. Breast reddish brown spotted with white. Flanks brown spotted with white. Rest of under parts white.

NEST AND EGGS.

With a few rare exceptions the nest is placed in a hole of a tree, either one formed naturally by the breaking off of a large limb or in a deserted woodpecker's hole, the opening of which has been slightly enlarged by decay. A site is always chosen near the water, the tree frequently overhanging the latter. The nest is composed of weeds and grasses and lined with downy feathers from the breast of the female. From eight to fourteen eggs are laid about the latter part of April or first of May. They are of a pale buff color and vary considerably in size.

HABITS.

According to all authorities and the testimony of all who have seen the bird, the Wood Duck is the most beautiful of all the several hundred of this species found on the globe. He is truly a peacock among the ducks and like the majority of both the human and animal races who are graced with unusual beauty, he is fully aware of it, and does his utmost to display it to the best possible advantage at all times. His graceful movements and resplendent colors are the admiration of the females, which except for their lithe forms would be but an ordinary appearing duck.

Just imagine the male, with all his gorgeous, iridescent plumage replaced by a dull, sooty brown, and you will see the female.

As if to have as little in common with other species of ducks, the Wood, Summer, Tree, Acorn or Bridled Duck, as it is locally called, frequents chiefly fresh water rivers

and secluded lakes and ponds. Perhaps this may be the choice of the male for personal reasons. Surely, when seated on the still water, shadowed by the overhanging branches, his beauty is doubled by the inverted image reflected by the mirror-like surface.

In the Spring, about the latter part of March, is the time to see these ducks to the best advantage. Dr. P. L. Hatch who has observed them in Minnesota says:—"In the denser portions of the vast forests which embrace the inlets and bays of many clear and beautiful lakes, I have cautiously sought a quiet covert toward the evening of some warm day, from which to observe this charming species in Spring. Perfectly concealed in the thickets within a yard of the deeply shadowed water, with my field glass in hand, I have many times watched them by hundreds, until darkness hid them from my sight.

"These occasions were in the season of their love, when the matchless plumage of the males was displayed as at no other time in their entire history. With the crest elevated, and like a coronet on the head, which is drawn backward as proudly as the Swan's, each male, the undisputed monarch of the mirror lake, glides here and there, in and out, in his ingenious and undisguised endeavors to outdo every other in his imperial display, until the seething resplendence seems to be one moving scene of grace and indescribable beauty. During this wonderful spectacular exhibition of motion, the woodland echoes have frequently borne away the characteristic and impassioned notes of the rival lovers, 'O-o-o-eek, o-o-o-eek.'

"Thus completely concealed as I was they would approach me closer and closer, as the shadows deepened, until verily I could have touched the nearer birds with a coachman's whip."

These dainty birds never nest on the ground, but either in the hollow end of a broken stump, or branch or a deserted Woodpecker or squirrel's hole.

The trees chosen are either overhanging the water or within a few yards of it. Mr. E. H. Forbush states that the late J. J. Coburn, when alive, an enthusiastic observer of bird life, while removing a stove-pipe from his boat house at Lake Quinsigamond, found a dead female Wood Duck in the pipe near the

stove. It had probably entered the pipe thinking to find a good nesting site, and was unable to escape and so perished.

When the female is sitting on the eggs, the male always stands on guard near by, but never assists in the process of incubation. When the female leaves the nest for any reason, the eggs are covered with down with which the nest is lined so that they will retain their warmth.

When hatched the downy young either fall into the water or, if the tree is some distance away, are carried to it by the mother, who takes them, by the wing or the back of the neck, in her bill. As soon as the young are able to fly, these and other broods, together with the parents, congregate in flocks, preparatory to migration to the South in October. Their flight is very swift and graceful. They wing their way between numerous trees and branches without difficulty.

In the fall they feed largely on acorns and chestnuts, from which fact they derive one of their local names.

If any of our readers are so fortunate as to have the opportunity to observe these birds at close quarters, I trust that they will shoot them with a camera and not a gun, as they are getting altogether too scarce, and I fear their days are numbered. Where ten years ago there were dozens, there are now none. The causes of this decrease in numbers, are many. They are much in demand for ornaments in the home; large quantities of the barred feathers on the flanks, are used for tying artificial flies for trout fishing; and the gourmand pays a high price for their flesh.

LONG-CRESTED JAY.**A. O. V. No. 478b.***(Cyanocitta stelleri macrolopha)***RANGE.**

Western United States in the Rocky Mountains; north to Wyoming, west to Utah, and south to Northern Mexico. It is a resident and breeds wherever found.

DESCRIPTION.

Length, 12 inches; extent, 18 inches; tail, 6 inches; crest, nearly 3 inches. Bill and feet, black. Eye, dark brown.

Adult male and female.—Entire head, crest and neck black, changing to a sooty brown on the back, and to a blue on the breast and rump. Wings and tail rich indigo blue barred with black. The feathers on either side of the forehead are tipped with bluish white. A spot of the same color on both eyelids.

Young.—Much more sooty, and the black bars on the wings are very faint.

**NEST AND EGGS.**

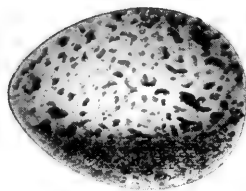
These birds generally nest in small pines, not very high from the ground, usually between six and twenty feet. The nest is composed of small sticks and lined with fine roots and pine needles. The eggs are four or five in number, of a greenish ground color, blotched with olive brown and purple.

HABITS.

The Long-crested Jay while not equal in destructiveness and general as handsome a bird as his eastern mischief making. They inhabit relative, the Blue Jay, is fully his the mountain slopes, generally pre-



LONG-CRESTED JAY.



fering the outskirts of the forests near some water course. They are inveterate scolds and thieves and they are never as happy as when teasing a smaller bird or committing some petty depredation. They seem determined to find out the why and wherefor of everything they see or hear, and they can be quite easily called by imitating their call or by making any unusual noise.

They are generally very shy and quite difficult to approach, as they contrive to keep two or three trees ahead of their would be slayer, and while their voice is very much in evidence, they are only seen occasionally as they fly from tree to tree. They are unexcelled as mimics and can imitate almost any sound, from the shrill cry of a hawk to the chattering of a squirrel. Many a weary hunter, returning from his day's tramp, has heard what he supposed a hawk, and thinking to add to his trophies for the day, has started in pursuit. He is led a merry chase through the thick brush, always hoping to find his prey in the next tree, till in despair he gives up the chase. To add to his discomfiture, he finds that he has not been pursuing a hawk at all, for as soon as he turns back, the harsh discordant cry of the Jay mocks him from the depths of the next pine.

Although generally wary, where not molested they become quite tame, and will come about the farm houses and feed on the pieces of bread or meat that are thrown out

for them. While very greedy at all times they always show forethought by laying by a store of food for the morrow. After having eaten all they can, they will carry off piece after piece and conceal it. They are not at all particular about their food and will eat anything that is edible. In winter, pine seeds form a considerable portion of their diet. I am sorry to say that they are also extremely fond of the eggs and young of other birds. Thus they are the cause of breaking up many a happy home. Their feet are strong and are used in holding their food while tearing it up into pieces suitable for swallowing.

All birds have a song of some sort. The Jay appears to realize that there is a ludicrous lack of harmony in his, and rarely utters it in public. In the early spring it may be heard as he endeavors to win the love of some coquette.

With numerous bows and grotesque antics, he proceeds to utter a series of low warbling notes, interspersed with shrill whistles and imitations of the notes of many other birds.

They are very quiet during nesting time. The female sits very close and will allow you nearly to touch her before leaving the eggs. When disturbed both birds will unite in most vigorous outcries. They evidently do not realize that they are being treated just as they themselves have treated scores of other birds.



AUDUBON'S WARBLER.



AUDUBON'S WARBLER.*A. O. V. No. 656.**(Dendroica auduboni.)***RANGE.**

The Pacific slope west of the Rocky Mountains, from British Columbia south to Central America.

DESCRIPTION.

Length, 5.25 inches; extent, 9 inches; tail, 2.25 inches. Bill and feet black. Eye brown.

Male.—Entire upper parts including head and neck, bluish ash, streaked with black. Cheek dark gray. Chin, throat, rump, middle of crown, and patch on sides of breast, yellow. A white streak extends from eye to back of head, also a white spot on lower eyelid. Wings black, the coverts broadly edged with white on outer edge, forming a large white patch on the wing. Upper tail coverts gray, the feathers having black centers. Tail black, the five outer feathers having white spots on the inner webs, varying in size from small on the inner feathers to large on the outside ones. Breast, black, this color extending down the sides in streaks. Beneath white.

Female.—Similar to the male with duller markings and brown back.

NEST AND EGGS.

This Warbler builds a neat nest of fine strips of bark, roots and grasses, lined with fibrous down, horse hair and feathers. This nest is placed either in the forks of willows or on the outer branches of firs, ranging in height from three to thirty feet.

The eggs are laid in June, they are four or five in number, of a grayish white color, speckled with black and reddish brown, chiefly at the larger end.

HABITS.

This little bird which, with the exception of the yellow throat, is almost the exact counterpart of the eastern Myrtle Warbler, is a very common bird throughout the north-west. They arrive from their southern quarters early in April, and are very active, flitting about among the oaks and gigantic firs. About the towns they display considerable familiarity, resorting to the gardens and hedges in company with the sparrows.

In winter they prefer to frequent willow swamps in search of insects.

WHITE-THROATED SPARROW**A. O. U. No. 558.***(Zonotrichia albicollis.)***RANGE.**

Eastern North America from Georgia to Labrador and west to the Great Plains. Breeds from northern United States northwards. Winters from the Middle States southwards.

DESCRIPTION.

Length, 7 inches; extent, 9.5 inches; tail, 3.25 inches. Bill and feet yellowish brown. Eye brown.

Adult male.—Two black stripes on the crown, separated by a medium one of white. A broad stripe extends from base of bill, over the eye and down sides of the neck. This stripe is white except that part in front of the eye, which is yellow. A black streak on sides of head back of the eye. Back, chestnut streaked with dark brown. Edge of wing yellow. Two narrow white wing bars. Throat white edged with black on sides and ending abruptly against the dark ash of breast and sides of head. Belly white.

Female and young.—Colors duller and throat gray.

NEST AND EGGS.

The White-throated Sparrow breeds abundantly throughout northern New England, New York, and Michigan and eastern Canada. The nest is placed on the ground, rarely in bushes. It is often slightly concealed under a fallen branch or placed under an overhanging stone. It is rather a bulky nest composed of grasses and weeds. The eggs are laid early in June. They are four or five in number, pale greenish blue, sprinkled and blotched with brown, chestnut and lilac. Distinguished from the common Song Sparrow by the larger size.



WHITE-THROATED SPARROW.



HABITS.

The Peabody Bird, by which name the White-throated Sparrow is frequently known, is unquestionably the most handsome of all the Sparrows. His plumage, not in the least gaudy, harmonizes perfectly in every detail and presents a very pleasing picture to the eye. The colors on his back, as in most of the Sparrows, correspond closely to those of the dead leaves, and as he spends most of his time on the ground he is a very inconspicuous subject.

If anyone doubts the value of our song birds as insect destroyers, you can easily convince him of his error. About the first week in April or the latter part of September, when these birds are in full migration, take this doubter out with you and watch them. Low brush, in a somewhat swampy locality, is their favorite abiding place. Just before reaching this place you will hear a commotion among the leaves. Now approach quietly so as not to disturb them, and when close enough stop and watch a moment. Ah! sure enough, there are perhaps fifteen or twenty White-throated Sparrows in sight, each one scratching as though his life depended on it, and throwing the leaves in all directions. Now if your friend is at all sincere and is willing to be convinced, he will know that these birds are not working so diligently for their health, but that they are destroying countless numbers of insects, and

therefore that they are of the greatest value to mankind.

Another step and perhaps one sharp eyed little fellow sees you. With an angry, business-like chirp, he hops upon a branch and with his fellows, who at his first warning followed his example, proceeds by his vigorous chirping, to inform you that your presence is not wanted, his whole body quivering meanwhile from the vehemence of his arguments.

Early in the morning and toward dusk their song rings out sharply and clearly, amid the babble of the other birds. While at times it sounds rather melancholy, still it is a more perfect song from a musician's view than that of any other bird. No artist on his flute can produce a clearer, sweeter note than can this gifted songster. The song consists mainly of six notes, the first generally low and the remaining ones of a higher pitch. He seems to delight in seeing how many variations he can get on these notes by changing the length and key.

During a warm shower in spring, when the other birds are silent, you will see him perched on one foot in a low bush, with tail drooping, and head up, merrily giving voice to his welcome carol.

But they cannot tarry long as they must hurry to their nesting places, so that they may be ready to return again in the fall, before the weather is too severe.

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Entered at the Post Office at Worcester, Mass., as second-class matter, Jan. 16, 1901.

A number of subscribers have sent us from fifteen to forty new subscriptions each, besides numerous blocks of two, four, eight and ten from others. We are very grateful for what we have received, but we want others to send us more. It is a small town that cannot furnish at least a dozen who are interested in, and want to know the birds, while the larger cities contain hundreds who would be glad to subscribe if the magazine is brought to their notice. You may say "What good will it do me to secure new subscribers to this magazine?" Let us see. The price of our publication is very low, yet we offer four subscriptions for \$1.50, a discount of 25 per cent. Aside

from this you will have the satisfaction of knowing that you are helping others to gain knowledge concerning our feathered friends and furthermore, we intend to increase the *size* of AMERICAN ORNITHOLOGY (not the price) as soon as subscriptions warrant it.

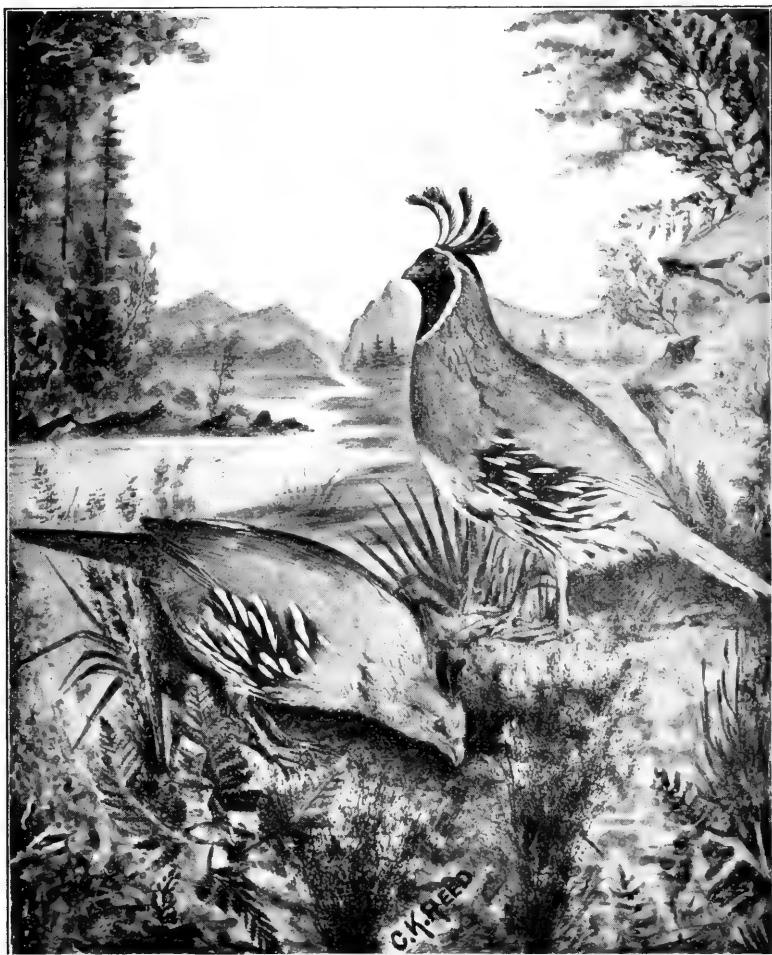
Don't be afraid to send in notes in regard to the birds which we are to publish. One person's observations are of just as much value as another's, and yours may be just what we want. Grammatical errors, or mistakes in spelling or punctuation, make no difference. What we want is reliable notes.

Our June number will contain Western Winter Wren, Meadow Lark, American Avocet, Harlequin Duck, and Parula Warbler. Anything of special interest in regard to these will be appreciated.

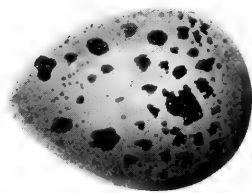
A word about photographs. Do not send blue prints, as we cannot use them; prints may be on brown or black and white paper.

We have awarded the short story prize for February contest to Miss Mary G. Townsend. Her article is entitled "Spring Migration," and will appear in our May number.

The photo prize goes to Wm. H. Fisher, who sent an excellent photo of the nest and eggs of the Least Tern in situation. This will appear with the article and illustration of the bird in a later number.



GAMBEL'S PARTRIDGE.



GAMBEL'S PARTRIDGE.**A. O. V. No. 295.***(Callipepla gambelli.)***RANGE.**

Principally Texas, Utah, New Mexico and Arizona, breeding throughout its range.

DESCRIPTION.

Length, 10 inches; extent, 15.5 inches; tail, 4.5 inches. Bill black. Legs and feet brownish. Eye brown.

Male.—Top of head bright chestnut, bordered with black on the sides. Crest black. Forehead, grayish black and separated from the chestnut by a narrow white line which crosses the crown and continues down the side of the neck. Chin, throat, and sides of the head below the eye, black, bordered with white. Entire upper parts, including the wings and tail bluish gray. Wings tinged with olive, the inner webs of the secondaries edged with white. Breast, bluish gray shading to buff on the lower side. Abdomen black. Flanks bright chestnut, each feather having a white stripe in the center.

Female.—Back tinged with brown. Head brownish. Crest gray. Throat buff, changing to gray on the breast, and again to buff below. Wings and flanks as in the male but duller.

NEST AND EGGS.

The nest of Gambel's Partridge is usually simply a hollow scratched out in the sand, though occasionally it is lined with a few grasses. It is generally concealed either under a pile of brush, or beside a clump of grass, the tops of which bend down so as to hide it from view.

The eggs are laid during May, June, and July, the bird frequently raising two broods in a season. They are from eight to sixteen in number; although frequently as many as twenty-four are found in the same nest, being without doubt the product of two birds. They have a cream colored ground and are blotched and spotted with chestnut, drab and buff.

HABITS.

This regal looking bird, with his black feathered crest, is the handsomest of the western partridges, with the possible exception of his near relative, the California Partridge. Although a very distinguished appearing bird, I do not think in point of beauty alone he outranks the eastern Bob-white. In some

respects, however, he is far superior to his eastern cousin. If the eastern sportsmen who are worrying their brains about the future of the Bob-white, would only send some of them out west to take a few lessons in tactics from Gambel's Partridge, they would on their return be much better qualified to escape

from their human enemies at least.

While the Bob-white will stand still until discovery is certain, and then take wing affording an excellent chance for the sportsman to drop him, the western bird will at the first suspicion of danger proceed to, as the farmer would say, "leggit" as fast as he can. Away he goes, dodging over stones, under bushes and around boulders, until he has put a safe distance between himself and danger.

These birds may be found in almost any locality in their range in the southwest. It seems to make little difference with them, whether it be a dry, sandy region, a rocky mountain side, or an impenetrable thicket.

They are found on the mountains at an altitude of over five thousand feet. As they are not generally found at a very great distance from water, a traveler across the sandy deserts always welcomes the sight of these brave little inhabitants of the hot sandy waste. Mr. G. F. Brenner of Phoenix, Arizona, in speaking of a trip about seventy miles north of that place writes:—"A good portion of the road was without water, and warnings were placed at watering places to warn the traveler how far to the next water. In crossing a canal ten miles out, I was struck with an illustration on Gambel's Quail. The guide board said after the index finger 'Camp Creek forty miles to water,' and on this stood a male Gambel's Part-

ridge. I have met with this species at least twenty miles from water."

They are generally quite abundant in their localities, and in the spring coveys of them can be found scratching about in the sand and chasing grasshoppers and other insects. At this time they are very sociable and are constantly calling to each other with a low, rapidly repeated, and rather harsh whistle. During the intense heat of the Arizona summer these game birds prefer to remain in the shady spots in the creek bottoms.

During the mating and breeding season, according to Capt. Bendire, the male frequently utters a call like "Yuk-kae-ja, yuk-kae-ja," each syllable distinctly articulated and the last two somewhat drawn out. He says:—"A trim, handsome and proud looking cock, whose more sombre colored mate had a nest close by, used an old mesquite stump about four feet high and not more than twenty feet from my tent as his favorite perch, and I had many excellent opportunities to watch him closely. Standing perfectly erect with his beak straight up in the air, his tail slightly spread, and wings somewhat drooping, he uttered his call in a clear strong voice every few minutes for half an hour or so, or until disturbed by something. This he repeated several times a day. I consider it a call of challenge or of exultation, and it was generally taken up by any other male in the vicinity at the time."

The males have perfect control of the feathers forming their crest, even to extending them forward so as to touch the bill. During the mating season they use this to good advantage to give expression to their words of love. They are very pugnacious at this time, and combats between the males are frequent. The mother shows great anxiety about the safety of her little ones, and employs all manner of tactics to enable them to escape. Owing to their habit of running from danger, and of roosting in trees at night, which they do when the locality is favorable, these attractive game birds are on the increase.

Winter Visitors.

One cold day last March, when the thermometer was hovering close to zero and the ground was covered by an icy coating of snow, a flock of Redpolls came to visit me. They were very tame and particularly one, who worked for hours in the wheel-ruts of the driveway. He seemed so indifferent to my passing to and fro, that I became convinced he was either numbed by the extreme cold or perhaps had something the matter with his eyes, so I thought I would try to catch him, bring him in where it was warm, and feed him. It proved to be an easier task than I had expected. Creeping cautiously up to the unsuspecting little Redpoll, I quickly seized him in my hand and carried him into the house, where I put him into a cage provided with

seed and water. He did not seem at all afraid in his new surroundings, but immediately began eating as though he was half starved. At intervals he would fly against the bars of the cage in his attempts to regain his freedom and then, seemingly forgetting about it, return to his feast of canary seed. When darkness came, he tucked his head under his wing and went to sleep. The next day as the weather had moderated, I gave him his liberty. But instead of flying away as I had expected, he continued to feed about the grounds, even if somewhat more timid, for several days, when he disappeared, probably having joined his mates.

MISS RACHEL LOWELL.

A Virginia Turkey Hunt.

"Pardner, let's do the Turkeys a turn today," said my friend, John Seymour, to me one fine morning in late fall. He himself was a typical southern gentleman of rather an inactive temperament, although a great Nimrod. I had been staying at his residence on the historic James for some days, but thus far only squirrel, quail and hare had fallen victims to my amateur efforts at gunning. Of course I readily consented to my friend's plan, and ten minutes later saw us provided with guns and a good supply of shells, loaded with BBs and buck shot, for, in that sparsely settled country the chance of seeing a deer is great enough to warrant being prepared for such an event.

Thus prepared, we proceeded up one of the runs for which that section of country is famous, and after walking some minutes, crossed over and found ourselves in a forest of immense oaks. Here my comrade told me the Turkeys were likely to be found at this time of the year, as they feed upon the small acorns. But in the woods our search proved fruitless, as it did in several others which we subsequently visited, and it was almost noon and my patience was nearly exhausted, when from a slight rise of the ground on the right a large gobbler raised majestically in the air and flew away parallel to the course we had been taking. Although the distance was rather great we both fired and by some lucky chance hurt him badly enough to capture him. This occurrence revived my "drooping spirits" wonderfully, and I trudged along untiringly by the side of my companion. Soon we began to feel the pangs of hunger and not having brought anything for the refreshment of the inner man, we had resource to a neighboring peanut field, paying for our lunch after ordinary tramp fashion. Nothing more than squirrels, quail, etc., was seen until late in the afternoon as we were nearing home, and then, as we had almost given up all hopes of seeing anything more, we suddenly came upon two large birds that were feeding on the small nuts just over the brow of a ravine. Unluckily they saw us as soon as we did them, and I must say they act-

ed a great deal quicker, for upon the instant they sighted us, they started for "green fields" not liking our company I suppose. We fired but only had the satisfaction of seeing one of them drop, while the other flew grandly over the farther side of the ravine, doubtless well pleased with himself. We, too, were well pleased and considered our day's work a good one.

FRANK R. WHEATON.

DEAR SIR:—Sample copy of the February number of AMERICAN ORNITHOLOGY received. Enclosed find money order to cover eleven subscriptions, names enclosed. These are all teachers in this school. If the succeeding number is equally good you may expect as many more from this locality.—B. W. JOHNSON.

DEAR SIR:—You have struck the key note for a publication in regard to birds. Have shown the sample copy to seven interested bird parties and enclose check for seven subscriptions as the result, I prophesy success from the start.—L. M. JAMES.

DEAR SIR:—Enclosed find fifteen more subscriptions to your A. O. Kindly send me a few sample copies as I have worn mine out showing it, and am not done yet. You may expect more soon,—F. C. CLARK, Napa, Cal.

[Mr. Clark had already sent in seven subscriptions.]

Curiosities and Shells.

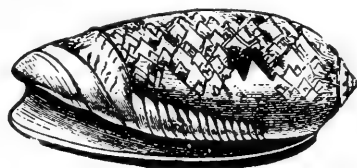


Tarantula Spider, finely mounted in box.	.50
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AMERICAN ORNITHOLOGY

FOR THE
HOME
AND
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FEB 12 1901

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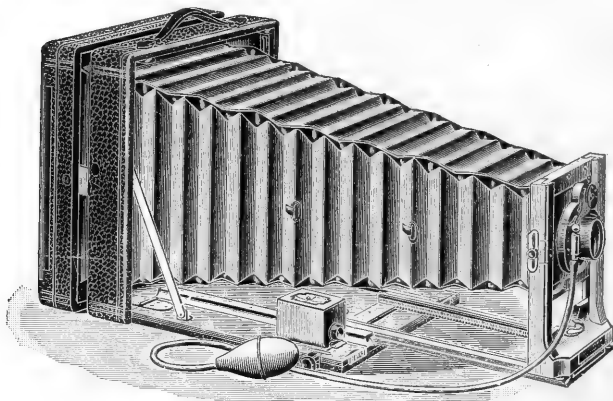
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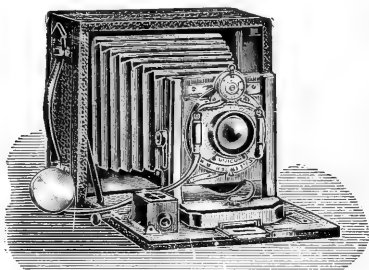
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CHARLES K. REED, Sta. A, Worcester, Mass.



Vol. I.

May, 1901.

No. 5

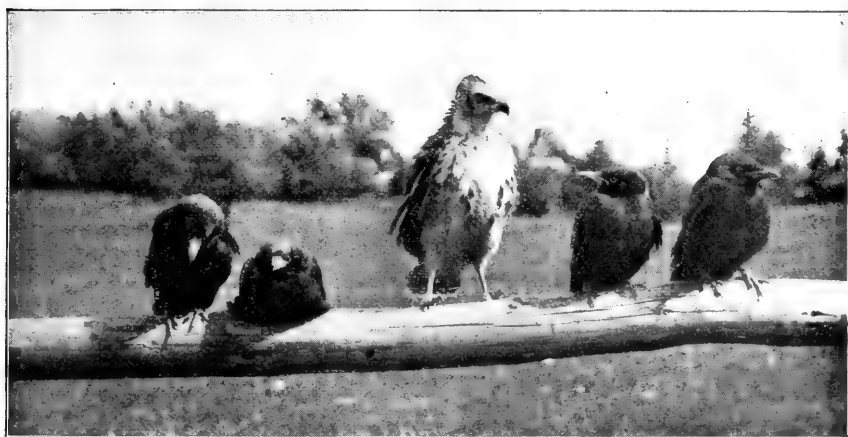


Photo by Chas. S. Butters.

YOUNG RED-SHOULDERED HAWK AND CROWS.

Four young crows on a rail, with a hawk,
 Came together one morning for a sociable talk.
 Crow number one says to crow number two;
 "Let us meditate over what we shall do
 In regard to this new fangled notion, or fad,
 With the rich and the poor, the good and the bad
 Of shooting at birds, their nests, and eggs
 With a box and glass eye, stuck up on three legs."
 Up stood Mr. Hawk and says to crow number three:
 "They are trying to take photos of you and of me."
 Crow number four quietly remarks, "let's not fret.
 But we'll all sit still, and see what he'll get."

C. H. A.

RUFFED GROUSE.**A. O. V. No. 300.***(Bonasa umbellus.)***RANGE.**

Resident in northeastern United States, ranging from southern Canada south to Georgia, and west to Mississippi, Arkansas and Minnesota.

DESCRIPTION.

Length 16 inches; extent 23 inches; tail 6.5 inches. Bill dark gray. Legs feathered nearly to toes; feet brown. Eye brown. Weight from 16 to 26 ounces. The Ruffed Grouse is subject to a red and gray phase, the same as the Screech Owl. The gray is by far the most common. In the red phase, gray is replaced by the red, being brightest on the rump and tail.

Male.—Top of head, neck, back and wings brownish barred with white. Rump and tail gray, the former covered with lengthened spots of buff edged with black, and the latter barred irregularly with brownish bands and terminated by a broad black band, edged on both sides with a band of gray. Throat and breast, buff shading into white on under parts. Breast and sides barred with brown. Ruff, broad and glossy black.

Female. Similar to male except that the ruffs are small and brown, and sometimes lacking.

NEST AND EGGS.

The nest is placed beneath a fallen tree, under an overhanging stone, in a brush heap, or at the foot of a tree. It is generally located near the edge of the woods or near a clearing. It is simply a depression in the leaves, sometimes lined scantily with a few pine needles or feathers. The eggs are laid from the middle of April to the middle of May. They lay one a day until the complement is complete. Incubation lasts from three to four weeks. The number of eggs varies from seven to fifteen. They are cream color, varying in shade from almost white to a rich buff, in some cases.

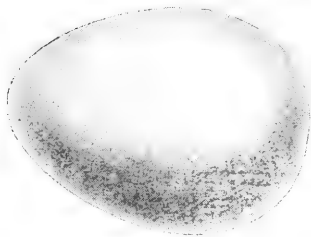
HABITS.

Ruffed Grouse, the king of American Game Birds. He inhabits chiefly heavy timbered districts, and is commonly but erroneously known in New England as the Partridge, and in the south as the Pheasant. These grouse furnish an excellent example of the cunning that a bird will develop if forced to. No other bird has been subjected to such persecu-

tions as this one, and it is due solely to their craftiness that any are left about the more thickly settled cities and towns. Originally and even now in sparsely populated districts, they are quite tame and will allow themselves to be approached to within a few yards, merely staring curiously at you. But how this changes with the advance of civilization. Ever on



RUFFED GROUSE.



the watch for danger, they either depart from the locality before you are near, or perchance think to conceal themselves from your view, and only take wing as a last resort. Many a wanderer through the woods has been startled by a tremendous disturbance, resembling the rumbling of thunder, just beside him, and was unable to account for it. Even after long association with the grouse, unless your nerves are remarkably steady, your pulse will quicken at the sound as they rise. The grouse can fly as noiselessly as an owl if they wish, and why they should make all this commotion is rather a mystery, although some hazard a guess that it is to warn other birds in the vicinity that danger is near.

As spring approaches they begin preparations for housekeeping. At this time, oftener than any other, you will hear the male drumming. His vocal ability is very limited so he has to resort to other means to produce his music. He is very particular about the audience he plays to, and few persons have an opportunity to witness the spectacle. I have been fortunate enough to observe it twice, the last time under very favorable circumstances. I was watching some small birds when I heard a rustling at one side, and looking up saw a grouse standing on a stump not over thirty feet distant. Which way he came from I could not tell as I had not heard a sound until he landed. He turned around on the stump several times looking for anything suspicious. At last he

satisfied himself that he was alone. Spreading his tail and inflating his chest he commenced to beat his sides with his wings, first slowly so that I could count the strokes and hear each one fall with a dull thud on his side, then faster and faster until the sound merged into a continuous rumble. This he continued for perhaps ten seconds, then stopped and listened intently for as much longer. He then silently flew away and soon I heard another low rumble from a distant part of the woods.

Probably many of our readers, especially those living in the country, have often seen a Plymouth rock rooster standing on a barrel and beating his sides lustily. While his is a very crude performance compared to that of the grouse, it originates from the same motive, either desire to show his strength to the females or as a challenge to other males. There is a difference of opinion as to how the grouse drums, and several noted ornithologists have claimed they do not allow the wings to touch the body, but that the sound is produced by the wings beating the air. In this latter case you could hear only a humming sound caused by the air rushing through the feathers, whereas you can distinctly hear the beating of the wings on the sides too. I have never heard anyone as yet claim that a rooster does not strike his sides.

After having obtained a partner, they commence building their nest, that is she does for he is too proud to work. It is not a very severe

task though as it is simply a hollow in the leaves. The one shown is in a favorite location. It is an excellent photo, both from a photographer's and a naturalist's view. The nest contains fourteen eggs although

part of them are hidden by the sides of the hollow. In regard to this nest, Dr. J. B. Pardoe writes, 'The nest was found near here (Bound Brook, N. J.). I tried hard to photograph the mother bird on the nest.



NEST AND EGGS OF RUFFED GROUSE.

but she always glided quietly away when I approached. I watched the nest very carefully, as I wanted to photograph the young if possible. One night when I looked at it one or two of the eggs were pipped. 'Now,' I thought, 'by tomorrow noon I can photo the young ones.' But when I got there they had all hatched and gone. An old settler told me they would start to run with one half of the shell fast to them.

They are very sturdy and forward."

In all probability you would pass right by the nest without noticing it, especially if the bird was at home. She knows that her colors and markings resemble the dead leaves so closely that she is not apt to be seen. She will remain upon the nest until in danger of being trod upon, and then leave with a loud whirr. If, after recovering from your surprise you try to find the

nest you may be baffled for some time, as the rush of air caused by the bird's sudden flight causes a number of leaves to be thrown over the eggs, partly concealing them. The eggs hatch in about four weeks, and the young immediately leave the nest. They are cute little fellows, little balls of brown and yellowish down, supported on pink feet that carry them over the ground at a surprising rate. Although not yet acquainted with danger, at the first shrill warning cry of the mother each one instantly conceals himself under a leaf or branch, while she leads the cause of the alarm away from the vicinity. Soon she returns and at her first sharp cluck, each little chick with a happy "peep peep" springs from his place of concealment and hastens to her side. At night she gathers them under her the same as a domestic fowl.

As soon as their wings are strong enough to support them, the young roost in trees as do the old birds. In the fall they stay in bands of five or six birds each, and live on acorns, choke berries, wild grapes, all kinds of berries and foliage of numerous plants. In the winter their food consists mainly of buds, that of the apple tree being the favorite. They roost in coniferous trees unless the ground is covered with a fall of light

snow, which they will burrow into, and find a warm resting place. If disturbed while feeding they do not all rise at once, but singly. While their wings are short they are powerful, concave, and the feathers rigid, thus making their flight extremely rapid. They dodge through the branches without any diminution of speed.

An Hour with the Birds.

April 14th I took my first tramp of the 20th century. The day was perfect; not a cloud in sight. I mention this as for the past three weeks it has rained almost constantly. I started out about two o'clock, which is rather late to find the birds moving about much. My first signs of bird life were observed immediately on opening the front door. There perched on the front steps, the walk, gate, fence and rose bushes were upwards of twenty-five of the *Passer domesticus* (more commonly called "those ugly little English sparrows") all squawking for all they were worth. I saw several flocks of Redpolls and Gold finches, the latter still in their winter garments. One clump of pines contained a flock of Siskins. They were very tame and I could almost catch them. Juncos, Song, Fox and Tree Sparrows were abundant; Bluebirds not so much so as I would like to see. The birds are somewhat backwards about coming north this spring, owing to the inclement weather. A few warm days will bring them along in great numbers.

R. A. S., New York.

The Lost Mate.

"Chickadee dee, Chick a dee dee
No bird of the winter so merry and free;
Yet sad is my heart, though my song one
of glee
For my mate ne'er shall hear my chick a
dee dee."

The last day of winter, a cold windy day, I went out on the hill side of an old apple orchard, to see if the bluebirds, who usually make their homes there, had yet arrived, and finding none went on to the edge of a wood listening to a flock of Chickadees as they repeatedly told their names, as very few birds are willing to do, so plainly. Now and then one would give their plaintive little love song of "phoebe" and from a distant tree, made sweeter by the distance "phoe-be" "phoe-be." A little apart from the other trees came the most mournful bit of bird music I ever heard, and for a time I thought I must be near some, to me, unknown bird, but on following up the new song I came directly upon a dear little Chickadee, all alone, and he confidently repeated over and over to me, these three syllables:—"poor bird- ie" "poor bird- ie" in the most plaintive, mournful tones I ever heard. For nearly half an hour I remained with him, hoping, in vain, to hear one

note from the little fellow that would show him to be after all, the bright, sociable, happy bird I had always known, but he constantly mourned for the "poor bird-ie" until I felt sure that his chosen mate must have met with some sad end, and I went home to examine all my bird books, but I found no mention of the sad song, Emerson says

"Thy call in spring
As 'twould accost some frivolous wing,
Crying out of the hazel copse, Phoe-be
And in winter Chick-a-dee-dee."

Bicknell speaks of "a short run of low, musically modulated notes, in fact a short warble." I have for years known the Chickadee and never before heard their song of mourning.

REST H. METCALF.

Exhibit of Birds and Insects.

The Bird Protective Association of America will have an exhibition at the Pan-American exposition which will interest bird lovers and agriculturists. The exhibit will consist of infested sections of trees on which will be mounted the destroying insects in their stages of development, together with the birds that eat these particular insects. It is the first exhibit of the sort, and will convey a great many lessons.



SHARP-TAILED SPARROW.**A. O. V. No. 549.***(Americanus caudacutus.)***RANGE.**

The Atlantic sea coast from southern Maine to Georgia, breeding from New Jersey northwards.

DESCRIPTION.

Length 5.25 inches; extent 7.5 inches; tail 2 inches. Bill yellowish below and brown above. Feet brown. Eye brown.

Male and female.—Head brown streaked with black. A broad stripe of buff through middle of crown. Line from bill over the eye and down the side of the neck a bright yellowish buff. Cheeks ashy, bordered below by a yellowish buff band, which extends from the bill downward. Back, rump and tail olive brown. Wings brown, the secondaries and coverts being edged with white. Throat white, bordered on sides with a black line. Breast and sides buff streaked with black. The remaining under parts white. Tail rounded and each feather sharply pointed.

Young.—More yellowish above and below.

NEST AND EGGS.

The nest is always on a salt marsh, and is generally fastened to the marsh grass, sometimes being as high as a foot from the ground, and under a piece of dried sea weed. It is composed of loosely woven pieces of marsh grass and is rather bulky for the bird. They generally raise two broods in a season, the first set of eggs being laid the latter part of May, the last in July. They lay from three to six eggs thickly sprinkled and specked with reddish brown, and a few black spots.

HABITS.

The Sharp-tailed Sparrow or Finch is different from other sparrows, in that because of his habits he might almost be classed with the waders instead of sparrows. They are found exclusively about the salt marshes on the sea coast, and feed largely on minute marine insects. I have had excellent opportunities for studying these birds in the marshes about Narragansett Bay where they are very abundant. They are very shy, which seems very strange as they are never hunted, and will not allow you to get a good view of them at close range. The ease and rapidity with which they thread their way through the closely grown reeds is marvelous, and you have to walk at a rapid gait in order to make them take wing. Their flight is peculiar. They fly low and with tail drooping, and hardly raise their wings above the level of the body. They go but a few yards in the air before dropping into the marsh grass



SHARP-TAILED SPARROW.



again, as they seem to be aware that they are safe as long as they keep out of sight.

If you force them to the edge of the marsh, they will fly over the water and make a wide detour back to land. As long as you remain on the marsh you will hear their song, first on one side, then an answer from the other. They have a peculiar song too, to correspond with their habits. It consists of two or three chirps, followed by a rasping "tzee-ee-ee." It is not a loud note, but it has considerable carrying power, and you can hear it at a distance of several hundred yards.

Although shy they are inquisitive too, and from time to time they will come to the top of the marsh grass, to see where you are. Instead of flying or jumping up as other sparrows would, they walk up until they reach the top. Having satisfied their curiosity, they relax the grip of their toes and slide down again.

Mr. J. B. Canfield, of Bridgeport, Conn., writes:

"Last June I spent two days on a marsh bordering Long Island Sound in Connecticut, and I had the good fortune to take several sets of eggs. The bird when disturbed will slip off of the nest and run along the ground for four or five yards before flying. A peculiar thing is, that if the bird has just left the nest, it will always excrement when it begins its flight, something a feeding bird seldom does. Although of retiring habits, it seems to be of a social dis-

position, for I have found the Virginia Rail, Seaside and the Sharp-tailed Sparrow nesting within a radius of 75 feet. Their eggs and young are very often destroyed by an unusually high tide, and I have seen nests containing dead young and with addled eggs.

"This marsh is covered with a growth of fine wire-like grass that is used extensively as bedding for cattle and for packing goods. In many places it is matted down the same as grain will often be after a storm. In these places you will often find the nest, sometimes under a piece of sea-weed left by the tide, and I have found several nests by turning over these pieces of sea-weed.

"The nest is a rather loosely woven structure of the marsh grass, lined with fine pieces of same, and is often constructed partly of green grass.

"The eggs are very hard to blow, the whites being very gummy and thick in fresh eggs, and if left a few days, it is almost impossible to blow them. This may be caused by the action of the salt air and water"

This habit of depositing the nest under seaweed which has been deposited on top of the grass, by the tide seems to be very prevalent. Of all the nests I have found (some twenty-five in number) fully three-fourths of them were hidden in this way. I have found them where the water at high tide would cover the ground under the nest, and come within two inches of the bottom of the nest.

To Rent.

A suite of rooms for a family of wrens. Location elevated. Large spacious rooms. Building made of squash, with fine balcony. Entrance made proper size for wren, nothing larger need apply. Beautiful surroundings, flower garden, fruit trees, etc., etc. Ready for occupation at once. Apply at 23 George St., Danbury, Conn., Ruth L. Comes.

Struggle in the Orchard.

Imagine if you can, a battle between a robin and a rat. A curious picture that. It happened last week in the orchard just back of our house. Mr. Robin was out looking for some breakfast, when a large rat appeared, evidently with the same intentions. Neither paid any heed to the other until the robin found a choice bit of something which the rat wanted also. I could not see what it was, but it was too large for Mr. Robin to carry, so he tried to break off a bit. The task took some time, for he was forced to stop every moment and drive off the rat. At last the food was broken and the robin quickly swallowed one piece and seized the other in his bill. Ha! Now the fight began in earnest. Mr. Rat in despair tried to snatch the food from his antagonist's mouth. How they did jump about. The rat had hold of one end while the robin bravely held on to the other. It seemed as though good fortune was smiling on the rat, for

at every tug he drew the robin nearer to the house, but suddenly the robin seemed to gain new strength, and although the rat danced about him tugging fiercely, he stood his ground. Just then the food broke and both contestants lost their balance. I had been craning my neck farther and farther out of the window during the excitement, and when the catastrophe came, I burst out laughing. The foes disappeared like magic, and the field where they had fought so bravely was deserted.

MILDRED B. MONCK,
Cleveland, Ohio.

Spring Bonnets.

As far as I can see, the continued agitation against the wearing of birds as ornaments, has had little effect here in Boston. Nearly half the hats seen on the street have on them various parts of what once were beautiful, happy birds. On some, heads; some, tails; some, wings; and on some the entire bird. What heathenish ideas of beauty some folks have. Can you imagine anything more ridiculous than a young woman sporting an entire Herring Gull on her head? I have seen one such, and scores with smaller gulls and terns. It seems a pity that women should cling to this barbarous fashion until actually forced to put it aside to escape prosecution. Perhaps they do not realize what they do.

EFFIE, Boston, Mass.

AMERICAN SPARROW HAWK.**A. O. U. No. 360.***(Falco sparverius.)***RANGE.**

Whole of North America east of the Rocky Mountains.

DESCRIPTION.

Length 10 to 12 inches; extent 21 inches; tail 5.25 inches. Feet yellowish brown. Eye brown. Bill blackish.

Male.—Top of head blue gray, with a chestnut patch in middle of crown. Hind neck, back, rump, and tail, reddish brown. Back barred with black. Broad band of black across end of tail. Crescent back of the neck, also on each side of the head back of the eye, black. Black band extending from the eye downwards. Breast varies from white to reddish, spotted with black on lower part. Wings slaty blue spotted with black on the shoulder. Primaries nearly black. Wings narrow and pointed.

Female.—Back, wing coverts and tail barred with dusky. Breast more thickly spotted than on the male.

NEST AND EGGS.

The nest is generally in the cavity of a tree, either a natural one or one formed by a woodpecker. Lacking these sites they will build in most any place where they can find the semblance of a cavity. The eggs are laid from early in March in the south, to the latter part of May in the northern part of its range. They number from four to six, and have a white ground color, sprinkled and blotched with chestnut and reddish brown. They vary very much in the marking, some being nearly white, just barely sprinkled with red, while others have the ground color nearly obscured by the markings. The blotches are frequently heaviest at the smaller end. There is much variation in shape also, sometimes being nearly round.

HABITS

This is one of the hawks against which little can be said. They do little harm and much good. It is not because of their diminutive size (for they are the smallest of our hawks) that they do so little harm, for they are strong and active, and one has been known to kill a quail, a larger bird than himself. In fact they frequently drive other hawks from the vicinity of their nests, by their valiant and repeated assaults from

above. When they can choose as they wish, they eat little else except grasshoppers. Their slender feet are perfectly adapted to holding these pests. These same little slender, but strong feet, with their sharp claws are equally well fitted for holding small birds, and it is fortunate that they prefer a different diet. Soon after the first of April they commence looking about for a place for their nest. Most of them find a



SPARROW HAWK.



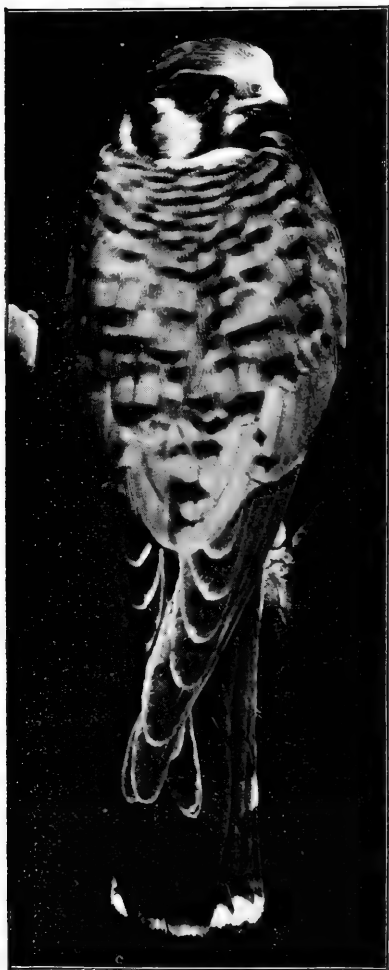


Photo by Dr. J. B. Pardoe.

deserted Flicker's nest that suits their fancy. If it happens that the hole they choose has already been appropriated by a pair of Flickers, it makes no difference, the latter must leave, if not willingly then by force. It sometimes happens that

hollow trees are scarce in their neighborhood. When this occurs they use the next best place that they can find. Their nests have been found in a sand bank, in an old Kingfisher's hole, in crevices in cliffs, and several times in pigeon houses about barns. Wherever the nest is placed the result is the same, the parent birds must work diligently from morning till night to satisfy the hunger of their little ones. Once in a while in order to get a little respite from the task of catching grasshoppers one of the old birds will bring them a small bird which will stay their appetite for a time.

As soon as the young are able to fly they become a very noisy lot. They will make short excursions from the tree and try to catch grasshoppers for themselves. They seem much elated if successful and return to their home uttering a loud mirthful cackle of "gill-ee, gill-ee," this repeated perhaps a dozen times. Their flight is peculiar and will always identify them. They fly with a succession of rapid wing beats, followed by a short sail of twenty or thirty feet. I am glad to see that the farmers are beginning to distinguish between their friends and enemies among the hawks, and no longer kill those that do more good than harm.

American Ornithology.

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Kindly remember that all notes or matter for publication must be received here before the 10th of the month in order to go in the next issue.

To those who have not yet subscribed: Kindly read the offer on outside back cover. Can you invest 50 cents to better advantage?

Have you any friends who are interested in birds, or do you know of anyone in your town or elsewhere, who is? If you will send in their names and addresses we shall be glad to mail them a copy of AMERICAN ORNITHOLOGY.

We have received quantities of fine photographs the past month, and can safely say that for the subjects, most of them are superior to any that have yet been published.

We want photographs of the nests and eggs of all North American birds in situation, and photographs from life of any birds. May and June are the best months in which to obtain them. See what you can do for us. We will pay fifty cents each for what we accept, and return those that we cannot make use of. If you have anything unusually fine or difficult to obtain, send it to us for inspection, with your valuation, and we will either accept or return same.

If you take a day's outing, or see any unusual, interesting, or amusing occurrence in regard to bird life, write it up for AMERICAN ORNITHOLOGY.

We shall be pleased to receive notes (for the July number) on the following birds, from all sections of the country where they are found:—Scarlet Tanager, White Pelican, Green Heron, Yellow-breasted Chat, and Bonaparte's Gull. When sending items in regard to any of the birds, make special note of the following:—Any striking features in their habits; describe note if possible; state if rare or common; nature of the country where most abundant; any peculiarity in flight; any observations about their food; composition of nest, where placed, and time of laying of the eggs.

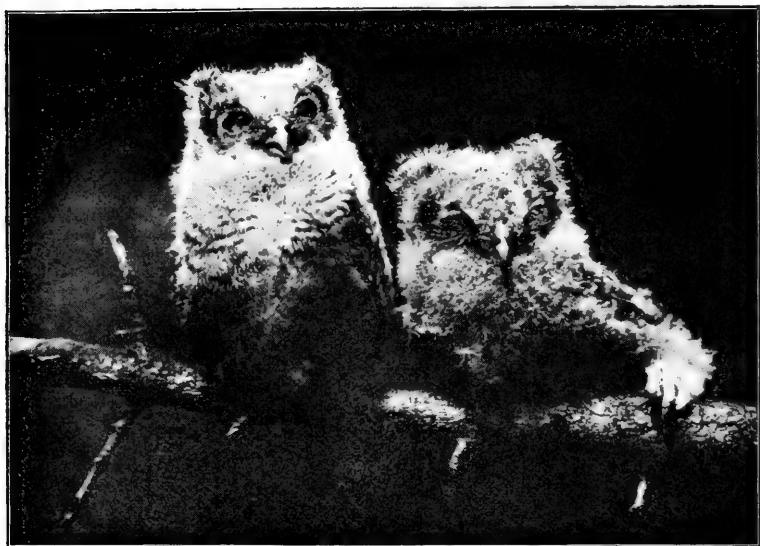


Photo by Dr. J. B. Pardoe.

YOUNG SCREECH OWLS.

SCOPS AND ASIO.

We are two little owls just from the nest,
 Out on a limb, and taking a rest,
 My name is Scops, I'm older than she,
 Her name is Asio, what else could it be?
 Father has gone to catch us a mouse,
 Mother's inside taking care of the house.
 Brother and sister are in there with Ma,
 They are too young to get out so far,
 The down on us all is light and fluffy,
 On me it is gray, while on sis it is buffy.
 Pa says he'll be glad when our feathers are grown
 So we can go and get grub of our own.

He seems to forget he was once young like us,
 And probably made just twice as much fuss
 When he was hungry, for something nice,
 Such as a sparrow, robin, or several mice,
 I see he is coming with a nice plump quail,
 So must ask you to wait for the rest of this tale.

SELRAHC, Worcester.

CALIFORNIA BUSH-TIT.*A. O. U. No. 743a.**(Psaltriparus minimus californicus.)***RANGE.**

The whole of California except the northern coast district.

DESCRIPTION.

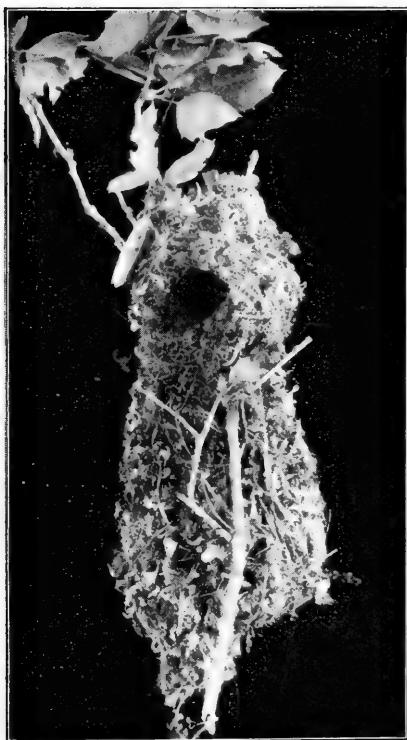
Length 4 inches; extent 6.5 inches; tail 2.25 inches. Bill and feet nearly black. Eyes dark brown.

Male and female.—Entire upper parts dark gray, the head being tinged with brown, and the wings having the primaries and secondaries edged with lighter gray on the outer web. Below dull brownish white changing to a brighter shade on the sides.

NEST AND EGGS.

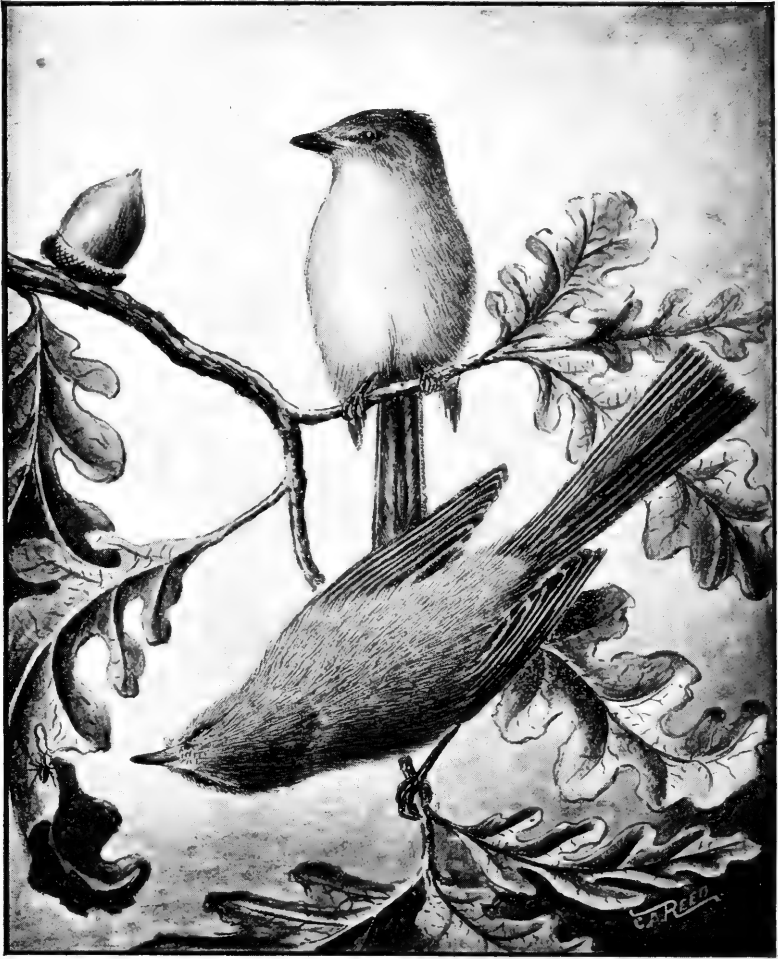
The Bush-tit builds a beautiful purse shaped nest which appears large for so small a bird. The one shown is a typical nest. Mr. Clark of Napa, Cal., gives the data for this nest:—"Length of nest over all 6.5 inches. Diameter at opening, which is .5 of an inch from the top, 2.5 inches.

Diameter of opening .75 of an inch, and it is protected by a hood. Greatest diameter (where the eggs rested) was 3.5 inches. The thickness of the nest walls is about .5 in. except the bottom which is about an inch. The nest was fastened to a small twig which ran through at the lower edge of the opening and served as a foothold for the birds. The nest is composed of lichens, moss, grass, oak blossoms, and various downy leaves, the whole being wonderfully bound together with silk from the cocoon of our large *Cecropia*.. These nests are generally lined with feathers or other soft material, though this one had no lining. I have found these nests at altitudes varying from eight to thirty feet."



The eggs range from 4 to 9 in number. They are pure white, laid usually about the middle of April.

Photo by F. C. Clark.



CALIFORNIA BUSH-TIT.



HABITS.

These long tailed, mouse colored little birds occupy the same position in California that the Chickadee does in the East. They are known and loved by all. They have a trustful, confiding nature, and seem to have no fear of man while hopping about among the bushes, intent on their search for insects. While at work they assume all possible positions, and keep up a continual twittering. They are very inquisitive little fellows, and will come about to see what you are doing, approaching so closely that you can nearly touch them. Mr. Clark writes:—"The habitat of this tiny weaver is California except northern coast district. They are with us in flocks during the winter, but pair and begin building as early as Feb. 25, this being the earliest date upon which I have found them building in 1900. On April 19, 1899, as I was strolling over the hill near our town, I saw a pair of California Bush-tits collecting material for a

nest. When I first saw them they had their tiny beaks filled with lichens and were flying from bush to bush, straight up over a hill. In order to keep them in sight I had to run as fast as I could, and even then they were the first to reach the summit and were lost to view. Their continual 'pit'—'pit'—'pit' soon revealed their whereabouts and I found a very pretty and nearly typical nest at an elevation of about fifteen feet. The finishing touches were just being made. One week later it contained six eggs. Wonderful acrobats are these little friends, for they never suffer a rush of blood to the head, although they are upside down at least one half the time, when feeding among the leaves. I have never taken a skin of this bird and think I never shall, unless I find one dead. I can shoot a Jay or a Woodpecker when I think it necessary but have not been able thus far to take the life of a Bush-tit."



Why Our Game Birds are Disappearing.

What is a game bird? You may say, "One whose flesh is good to eat," but that is too broad. Robins and blackbirds are considered as very good eating, but they are not by any means game birds. I think on the whole a definition that will cover the question is, "A game bird is one that by special legislation, is allowed, at certain seasons, to be slaughtered in unlimited numbers, by a body of men called sportsmen." Not a very pleasant outlook for the birds is it? All birds are endowed with a good share of common sense, and under ordinary circumstances are amply able to protect themselves. It does not take them long to distinguish between their friends and enemies. While foxes, skunks and a few other animals have killed a number of the game birds every year, still their depredations have caused no serious decrease in the numbers. Likewise with the few hawks and owls that prey upon them. Now we come to man the most ingenious, creative, and destructive of all animals.

Let us commence at the beginning. Our forefathers by much practice with their flint-locks became expert marksmen (to which fact we owe our freedom today). They were dependent upon their rifles for their supply of meat, and therefore cannot be criticized for killing the few birds that they did. Later the breech loading shot gun

was invented. Now comes the commencement of the downfall of the birds. Hunting which had hitherto been mostly through necessity now became a pastime and was pursued everywhere. Next a brilliant mind conceived the idea of having two barrels on one gun, thus giving him another chance to get a bird if he missed the first. So the double-barrel shot gun was formed. The cry on every hand was "birds, more birds," and the one who could bring in the most game was considered the best sportsman. At last one more clever than the rest struck a new idea. He thought, "If I could only know where the birds are before they fly I could get more. Ah, I have it." With great perseverance, he at last succeeds in training his dog to accomplish what he is unable to do, that is to find the birds. With his superior sense of smell, the dog could scent a game bird at some distance, and he trained him to stand still, and as it is now called "point the bird." This step created a new impetus to the game destruction, and the man who didn't have at least one bird dog, was not a "thorough sportsman." There is one part of the outfit that I have overlooked, the hunting coat. Hunters soon found that the birds were keen sighted, so in order to approach as closely as possible, before being seen, they had hunting coats constructed of brown material to match the general color of the woods. These coats were made for use as well as looks, for they were covered

inside and out with capacious pockets to hold the game.

Here you have the complete, up-to-date, modern sportsman: A man, a gun (not the old double-barrel, however, they use a six shot repeater now), a hunting coat, hat, cartridge belt, leggings, pair of hunting boots, and lastly (but most important) either a pointer or setter dog. Quite a formidable outfit to make war upon a flock of little birds.

As the matter stands now, the game birds (quail, woodcock, grouse,

and many ducks) are rapidly disappearing in many sections of the country.

It does not take a Solomon to see what the remedy should be. Many a hunter who now comes home with a full game bag, could not even get a sparrow if deprived of his four-footed companion. Now you wise men who make the laws. Just one more. "*Hunting with dogs prohibited at all seasons.*" The game birds will then need no more protection.

AVICULA.

KING RAIL.

A. O. V. No. 208.

(*Rallus elegans.*)

RANGE.

Fresh water marshes of eastern United States from southern New England, New York, and Illinois, southwards.

DESCRIPTION.

Length 18 inches; extent 24.5 inches. tail 3.25 inches. Bill blackish above, yellowish below, shading to dark at tip.

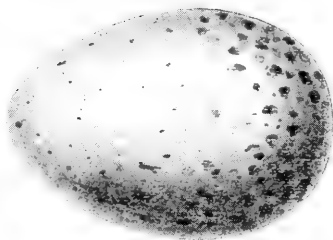
Male and female.—Upper parts including top of head, dark brown. Pale streak of buff extends from bill over the eye. Chin, throat and spot on lower eyelid, white. Sides of head, neck and breast, reddish brown. Flanks and lower part of abdomen black crossed by white bars. Feathers of wings and back edged with olive. Distinguished from the Clapper Rail which it resembles in size and shape, by the brighter markings on the back, and reddish color below.

NEST AND EGGS.

These rails make a rude nest of grass and weeds, which is placed on the ground, in a marsh, or in a clump of grass just above the water. They lay from six to twelve eggs, of a pale buff color, sparsely spotted with reddish brown.



.KING RAIL.



HABITS.

The largest of the rails. It is known as the fresh water Marsh Hen in distinction from the Clapper Rail which is called the salt water Marsh Hen. These rails are very sly, and it is difficult to flush one. If they do fly they go but a very short ways, before dropping down into the marsh again. Doubtless in crossing some swamp, you have come across a bog, and have had to walk quite a ways to get around to the other side. The rail has the advantage of us human beings here, for he does not have to go around, neither does he fly across. With out-spread wings he will run across the water, utilizing every stick or leaf that may be on its surface, for foothold. He also proves that it is not necessary for a bird to have web feet in order to swim. All birds can float on the water, and by using their wings as paddles make some progress, but the rail unless wounded and closely pursued, uses his feet alone for this purpose. It is also stated on good authority that when wounded they will sometimes dive under water and hold fast to the reeds with their long slender toes, just allowing to project up out of the water, their

bills so they can breathe. As their bill closely resembles the reeds they frequently escape in this manner.

The downy young are blackish all over. They leave the nest almost as soon as hatched and follow their mother about the marsh. Their food and that of the old birds, too, consists of seeds and leaves of various water plants, worms, and all manner of insects common to the marshes. They are somewhat nocturnal, and feed after dusk. Often in the evening or on a dark day, when the sky is heavily overcast with clouds, you can hear the loud harsh cry or scream of the rails coming from the marsh. If after dusk you go to a marsh where these birds are plenty, the first rail that you disturb will run off through the bushes uttering his cry, which will be taken up by all others on the marsh.

Their flesh is good, so many of them fall before the gun, but they are more fortunate in this respect than their other relatives, the Clapper and Sora Rails, for most of the hunters prefer the salt marshes where these last mentioned birds are killed in great numbers.



Spring Migration.

Spring. What heart does not rejoice at the sound of the name? What fond recollections it brings to mind of other springs; and of delightful rambles o'er fresh green fields and through scented woods. The snowy mantle gradually unfolds itself from Mother earth, and in its place comes a warm coat of green. The barren trees and shrubs commence to send forth their tender buds in anticipation of the coming of the little feathered beauties, for whom they annually furnish dwelling places, not, however, without ample compensation in the way of the destruction of their enemies the insects. Even now the great semi-annual bird wave has started on its

welcome invasion. Slowly rolling northwards with ever increasing force, it envelops the whole country and transforms the lonely fields, and silent woods into a veritable paradise teeming with joyous bird life. How we envy those who know the birds, their songs and habits; but patience, we shall know them yet. Armed with a field glass and accompanied by one learned in the craft we sally forth to conquer new fields. Under his skillful guidance the mysteries begin to vanish, and we soon learn to distinguish between sparrows and warblers, and to know some of the common birds by their songs.

MARY G. TOWNSEND.

How Sabattis Got His Christmas Dinner.

DR. GEO. MCALEER.



"The daughter of Natanis will have fresh meat for Christmas and be merry. Sabattis' bow is strong and his arrow true. Sabattis will go."

The great logs in the crude stone fire-place burned fiercely, and the crackling flames gave warmth and added cheer and comfort to the little log cabin. Jerked moose meat of the last killing in

the deep snows of winter time hung suspended from the rafters, bear skins and other peltry adorned the walls, and beds of elastic, fragrant spruce boughs built a few feet above the floor, upon light, spring poles of hackmatack, in the corners of the cabin opposite the fire-place, together with some cooking utensils, and rude articles of furniture, completed the furnishing and adornment of the cabin home of Sabattis and the daughter of Natanis, the chief of the tribe, now his squaw of a few years.

Humble as was this home, it was a palace in convenience and comfort in comparison with the bark and skin wigwams of but a few years before, and which were the only habitations known to the Indians even in coldest winter weather before the advent of the missionaries, Recollects and Jesuits, who thus impressed them with christian influences, the sancity of the family, the superiority of the sedentary as opposed to the nomadic life, and other christian virtues.

"But sposem bad Heengleeshmans come ag'in from the land of the south-wind way off and shootem our Black gown, burn our church, and kill your squaw and papooses, and all the peoples? Then there is no snow to get him the game."

"Natanis is strong. His braves have the hearts of bears and the eyes of all the stars. If the Engleesh come they will find a graveyard. The snow-maker made a big ring around the moon last night,—he will give plenty of snow. Sabattis will go before the sun gets out of bed tomorrow and our fire shall cook fresh meat to make us glad at Christmas."

This conversation took place more than one hundred and fifty years ago at Naurautsouak, near Norridgewok, on the banks of the Kennebec river, in the language of the Connibas, later known as the Norridgewoks, an extensive tribe of the great Abenaki nation.

During the afternoon Sabattis visited some of the warm ravines between the jutting, craggy hillsides and gathered an armful of trailing arbutus,—the great pink, swelling blossoms needing only the blessing of warmth and moisture to blossom forth in all their wealth of color and fragrance as in early spring.

He fashioned three beautiful garlands which he placed in water in water-tight basins made from white birch bark, and as the little chapel bell sounded the Angelus he wended his way hither and placed one upon the main altar beneath the lamp of perpetual adoration, another upon the altar of Our Lady, and the other upon the altar dedicated to the holy man, Saint Joseph.

Long before the break of day Sabattis set out alone upon his journey to secure good cheer for the Yuletide season in his humble cabin. Winter had not yet set in, there was but an apology for snow upon the ground, and but little ice had formed along the shores of the rivers at the slack water.

His moccasins pointed towards the head waters of the Seabasticook where it takes its course from the foot hills and mountains beyond. Camp was made the first night many miles away in the wilderness towards the land of the setting sun. He had seen no game nor signs thereof, but when the snow would come all would be changed. The trail was resumed with

earliest dawn and every nook and corner carefully, noiselessly scrutinized and explored,—and yet no deer, caribou or moose.

The day was leaden and lifeless; dense snow clouds banked the horizon; no sunshine broke through the tree-tops to tell him the hour or location. Snow in great broad flakes began to fall, and darkness following soon after Sabattis made camp near the summit of the divide which separates the Androscoggin from the Kennebec. The hooting of owls and the howling of hungry wolves were his only companionship during the night. The morning broke clear and intensely cold and plenty of dry, fluffy snow upon the ground made ideal conditions for successful still hunting.

Sabattis would now surely get fresh meat for Christmas. With brave heart he started out early following along the highlands which skirt the southern shore of the principal tributary stream as it journeys along in its course to join with its fellows to swell the waters of the Kennebec.

He soon came to the tracks of a large buck which led up the sloping hillside towards the heavy growth at its summit. These he stealthily followed for some time until he came to a place where a Loup Cervier had pounced down from a tree upon the unsuspecting deer and dragging him to earth had killed him, tearing to pieces and destroying in his blind rage what he could not devour.

He was soon upon a new trail which he followed for miles only to find where a pack of wolves had taken it up and cut him out;—and so it was throughout the day,—trail after trail taken up and followed only to end in disappointment.

The night of the third day found him making camp in a ravine which lies between the range of hills which divide the Wabaquasset, now the Sandy River, from the Sebeccook. He was tired. Every arrow was still in his quiver. But he was not dispirited. He was going to have fresh meat to furnish good cheer for the Christmas dinner.

The night was intensely cold, but in a hastily constructed and comfortable lean-to before a roaring fire on the leeward side of a great boulder in the ravine, and wrapped in his blanket and caribou skin and fatigued with the exertions of the previous days, but entirely confident of ultimate success, Sabattis was soon lost in deep and restful sleep.

With the earliest dawn he was again upon the trail when his keen eyes soon discovered a magnificent buck above him on the hillside within easy range. He had just arisen from the bed wherein he slept and was in the act of stretching himself as is their wont.

With the seeming speed and stillness of a flash of lightning sped the flint-tipped arrow of Sabattis, and soon the snow was crimsoned with the spurting heart's blood of the noble buck. A few wild bounds and to earth he fell never to rise again,—a few convulsive twitchings of muscles and soon all was over.

"*Le bonne sainte Vierge* tells true! *Le bonne sainte Vierge* tells true!" rang out clear and joyous on the morning air. The act of dis-embowelling was soon performed, and cutting some small beech saplings Sabattis returned to his camp-fire where he passed and re-passed them over the coals and finally twisted them into an endless rope with of sufficient length to encircle the antlers and pass over his shoulders, and so harnessed to his quarry he turned his steps homeward.

Strengthened with the strength born of success and cheered by the welcome which he knew awaited him from the anxious ones at home, his burden slipped lightly over the snow and scarcely impeded his footsteps.

He journeyed on until he had crossed the last ridge of land which divides the Wabaquasset River from the Sabasticook, the shore of which he reached soon after mid-day. Here he made his camp-fire, broiled tid-bits of venison, impaled upon a green forked sapling, over the burning coals, and ate his noon-day meal.

He tested the ice upon the river, and on the flat water at least it was safe and his heart was glad. He could now more easily and quickly make two miles than he could one through the woods, and the log cabin and the loved ones were already several miles nearer.

He was now hurrying along upon the ice which was slightly covered with snow and his burden was much lighter.

Ah! But what sound is that? A tremor shook his sturdy frame. A deathly pallor spread over his bronzed face. He stood as if paralyzed. Again? Ah, yes! and nearer! The dreaded wolves are in full pursuit! It required but a moment to think, decide, and act!

He would leave the forequarters to satisfy the ravenous wolves while he escaped with the saddle. They were soon cut asunder and shouldering his burden Sabattis ran as Sabattis never ran before. Fear accelerated his steps and hope spurred him on.

Louder and more fierce grew the howling of the pack, and as he cast a backward look at a bend of the river, a mile away, he saw the angry wolves fighting and tearing each other in their attempts to secure a morsel of the meat.

Lucky escape for which Sabattis was duly grateful and he forgot not to offer a prayer to the holy Virgin in thanksgiving for her good offices in his behalf.

But would the wolves be content with their portion and slink back into the depth of the forest when they had devoured it? Or would they again take up the trail and follow in pursuit?

He well knew their cowardly nature when alone, but what would they not do when gathered in a large pack and spurred on by hunger and the taste of blood?

Beads of perspiration rolled down his cheeks, but with renewed energy he increased his pace and hurried on. The hideous howling of the wolves had died away in the distance and he took new courage.

He must now be miles away from them. Fatigue seemed to overpower him. He would rest a few minutes.

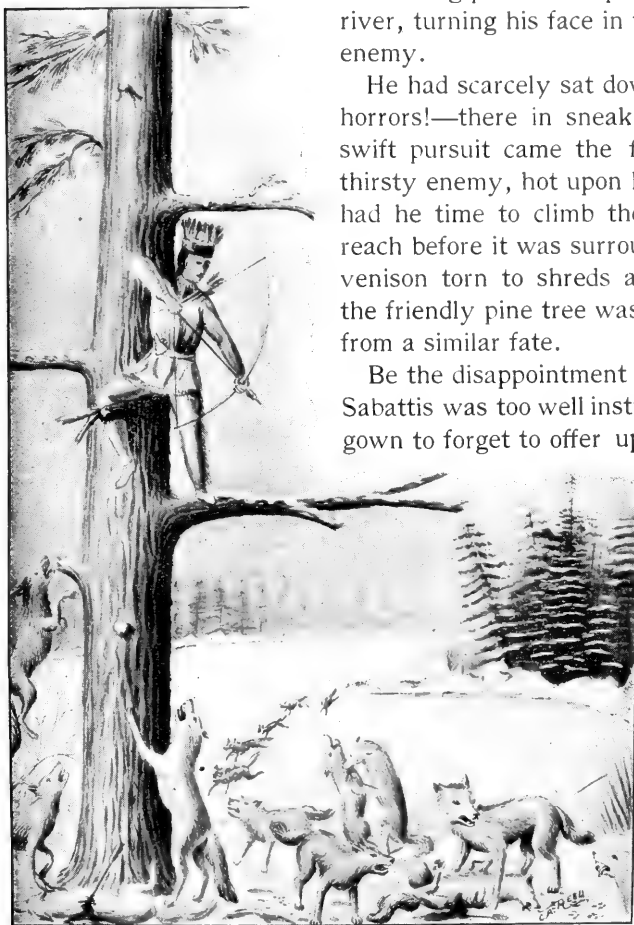
He swung his load from his shoulders and sat down upon a rock beneath a towering pine tree upon the bank of the river, turning his face in the direction of the enemy.

He had scarcely sat down when, horror of horrors!—there in sneaking, noiseless and swift pursuit came the fleet-footed, blood-thirsty enemy, hot upon his trail! Scarcely had he time to climb the tree beyond their reach before it was surrounded, his saddle of venison torn to shreds and devoured—and the friendly pine tree was his only salvation from a similar fate.

Be the disappointment now what it may Sabattis was too well instructed by the Black gown to forget to offer up a fervent prayer for his merciful deliverance, and although he could not now see how, the good *sainte Vierge* would yet make glad his Christmas!

It was a gloomy, murky afternoon. No ray of sunshine gave added light or warmth, There is no twilight in

the woods in the winter. Sabattis will have no comfortable lean-to to-night. Sabattis can build no camp-fire to give him warmth and comfort. Sabattis must stay in the tree-top. How long? Until help comes. When will help come?



[Concluded in next issue.]

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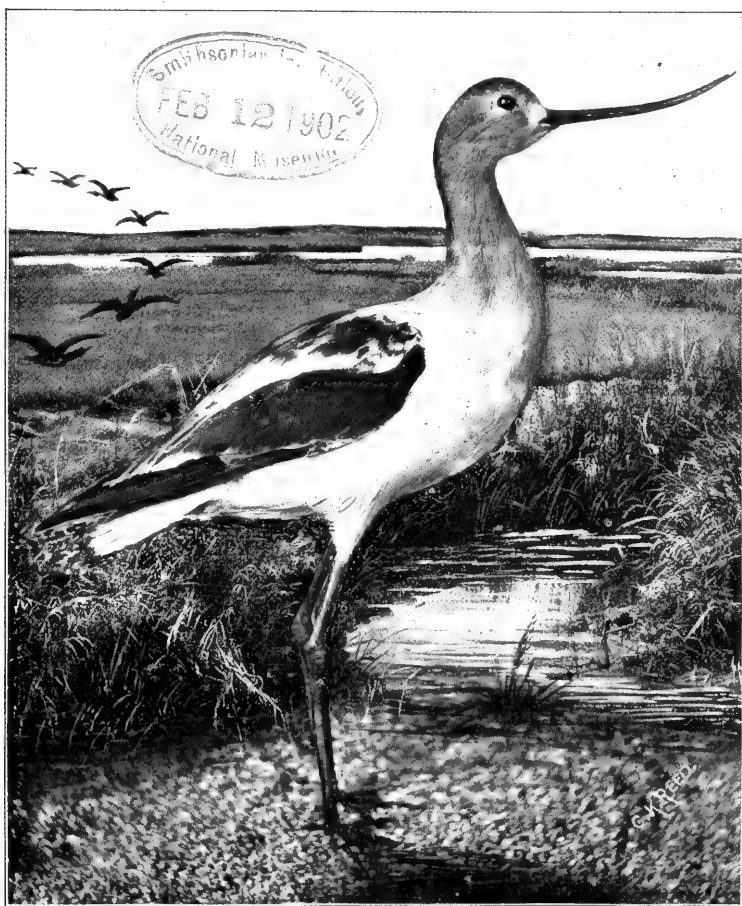
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Chas. K. Reed, 75 Thomas St., Worcester, Mass.



Vol. I.

June, 1901.

No. 6

HARLEQUIN DUCK.

A. O. U., No. 135.

(Histrionicus histrionicus.)

RANGE.

From the northern United States northwards. Breeds in the Rocky Mountains in northern U. S., in central Canada, Alaska, Newfoundland, Greenland and Iceland. South in winter to Maine on the Atlantic coast.

DESCRIPTION.

Length, 17.5 in.; extent, 25 in.; tail, 3.5 in. Bill olive black. Feet grayish. Eye reddish brown.

Male.—General color above ashy blue. Rump and tail coverts purplish black. Tail black. A few white tipped feathers on either side of tail. Head and neck dark slaty blue. White spot on ear coverts. A white band (changing to chestnut over the eye) extending from bill over the eyes and down the sides of the neck. A broad white crescent on the side of the neck, and another lower across the breast, both of these being bordered above and below with black. Wings dark slate. A white band at one end of the secondaries, and a large white patch on either side of the back. Flanks bright chestnut. The remainder of the under parts rather lighter and more brownish than the back. In summer the male is much duller in color.

Female.—Very different from the male. Head, neck, back, wings and tail, uniform sooty brown. A white spot before the eye and also back of it. Breast gray changing to white below.



HARLEQUIN DUCK.



NEST AND EGGS.

In this country Harlequins breed along streams in Alaska; about ponds in Labrador and around Hudsons Bay; and along a few mountain streams in western United States. The nest is always placed within a few feet of the water, and is composed of grass lined with feathers. The eggs are six to eight in number of a yellowish buff color.

HABITS.

By many this is known as the "Painted Duck," and surely no other of the duck species is more deserving of the name for the effect produced by its color and markings is somewhat startling. But the very oddity of his appearance and the softness of his plumage makes him one of the prettiest of the species. Some years ago on a visit to the Maine coast I was made mystified by hearing an old fisherman speak of shooting "Lords and Ladies." After much questioning I discovered that he meant these ducks. Their bright plumage having gained for them this name, which is commonly used throughout the Northwest. He is equally at home whatever the conditions. He is found far out at sea, where he rides lightly over the crest of the highest waves; in some sheltered bay; or inland on some turbulent stream. In the United States with the exception of a few about some streams in the Rockies, they are found only in the winter, and on the coast they are regarded as a deep sea bird. They are most

often seen singly or in pairs, although sometimes in winter flocks of from fifteen to twenty are found. Much remains to be discovered in regard to their nesting habits. The next few years will develop much material concerning the home life of this and many others of our feathered friends who live principally in the far north. As far as can be learned a great deal depends upon the nature of the country as regards their nesting habits. Probably in favorable localities they will build in a hollow stump, as they have been found in these situations, lacking these they build on the ground or in burrows, but always within a few feet of water. They are known to nest about some streams among the mountains in the west, as young have been seen there. These ducks both young and old are adepts at all aquatic feats both on and under water. It must tax even their skill to keep right side up on some of the western streams with their numerous waterfalls and rapids.

WESTERN WINTER WREN.**A. O. U. No. 722a.***(Troglodytes hiemalis.)***RANGE.**

Pacific coast region from Alaska to southern California, and eastward to the mountains of Idaho.

DESCRIPTION.

Length, 4 in., extent, 6 in.; tail, 1.25 in. Eye, dark brown.

Male and female.—Size small; tail always carried erect. Above brown changing slightly to reddish on the rump and the tail. Back, wings and tail banded with darker brown. A dull white line above the eye. Below brownish shading darker towards the tail. The flanks and under tail coverts crossed by wavy black bars. The Western variety differs from the Eastern in being darker and lacking from its back most of the white specks of the latter.

NEST AND EGGS.

The nest is placed in an old brush heap, generally near the edge of the woods, or against a wall. The nest is made of twigs and lined with moss and feathers. The one shown is lined with feathers from a Ring-necked Pheasant. The eggs are laid during May. They number from four to six, and are clear white in color, speckled with reddish brown chiefly at the larger end.

HABITS.

The Wren is one of our most familiar species, and is a personal favorite with everyone. Its familiarity justifies the affection with which it is generally regarded, for it is one of those tame little visitors which frequent the neighborhood of our homes in winter. It hops about in the shrubberies and searches carefully among the fallen trees for the tiny insects upon which it feeds. In its actions it resembles a mouse creeping through brush heaps and about stone walls. Occasionally it appears to view on top of the wall and utters its musical song. This is a very quick, brilliant and rattling performance, wonderfully loud for so diminutive a bird. The illustration depicts him in natural size.

This variety is considerably darker than the common Winter Wren, though the habits are the same. They have a very irritable temper and will scold at you as long as you remain near, accompanying their notes by vigorous jerks of their tail, which is always carried erect over their back. Mr. A. G. Prill, of Scio, Oregon, writes as follows concerning the habits of this interesting bird:—"This beautiful little wren is quite often seen in the foothills of the Cascade Mountains in Lime County, Oregon, and is most conspicuous to the observer during the winter months, being a constant resident, At this time they come close to the habitation of man. During the Spring and breeding season they are but seldom seen,

but generally found in and about some dead brush heap, or in a tangled mass of vines and brush, from which they bob in and out with lightning like rapidity.

Their nest is hard to find, being well concealed in an old brush pile, or a brier patch, generally close to the ground and near woods. Two broods are usually reared in a season. It was my good fortune to find two nests of this bird during 1900, and I will give a brief description of these. Both sets were undoubtedly laid by the same bird. While out in the country one day I came upon a small unused cabin or outbuilding some three or four hundred yards from a farm house. Near one corner of this building was a mass of dead brush and tangled grapevines and berry bushes. Seeing a Winter Wren disappear in this I proceeded to investigate and soon found the nest about two feet above the ground. The nest is composed outwardly of moss, dried grass stems, strips of fine bark, and considerable hair, and was completely lined with black and white feathers and a strip of snake skin about three inches long. There were five eggs, the markings of which were so faint that one at a short distance would call them white. The second set was found in a brush heap less than fifty feet distant on May 22, 1900. The nest was similar to the first but was not so compactly built, containing less weeds and moss and more feathers. It also contained snake skin.

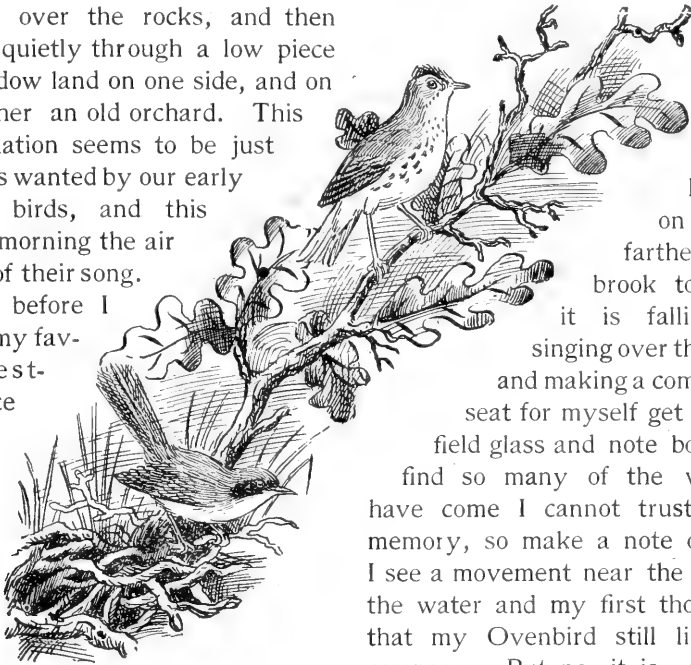


WESTERN WINTER WREN.



Nature's Church.

A bright beautiful Sabbath morning, and I am to attend service in Nature's own church, and among her choir of the richest of all singers, our birds. A favorite resort of mine during the early spring is along the banks of a brook, overhung with willows, birches and alders. The brook in many places making a joyous song of its own as it falls over the rocks, and then passes quietly through a low piece of meadow land on one side, and on the other an old orchard. This combination seems to be just what is wanted by our early spring birds, and this lovely morning the air is full of their song. Long before I reach my favorite resting place



I hear the deep rich notes of the Scarlet Tanager, Oriole and Rose-breasted Grosbeak. The notes very much alike in tone, and yet so easily separated one from the other. A Maryland Yellow-throat looks out at me from a pile of brush, and speaks his little piece in a short, business-like way, while

nearly over my head an Oven-bird is sedately walking along on the low limb of a small oak, stopping to give me a few of his notes, beginning low, then up louder and stronger, and finally flying to the ground within a few feet of me, and walking about as if he was the only one there, looking under leaves and picking out dainty morsels of food.

I keep on a little farther up the brook to where it is falling and singing over the rocks, and making a comfortable seat for myself get out my field glass and note book as I find so many of the warblers have come I cannot trust to my memory, so make a note of them. I see a movement near the edge of the water and my first thought is that my Ovenbird still likes my company. But no, it is another, the Water Thrush this time moving about if anything more quietly than his cousin "Auro." He did not favor me with his song. Now joining the chorus of warblers comes the sweet notes of Wilson's Thrush, and only a moment later the clear and flute like note of the Wood Thrush. Our friends the Brown

Thrasher and Catbird adding to the full chorus their ever changing notes. The bright flashes of yellow and orange, or the twitter and song of the many warblers among the fresh green leaves, keep my glass, and pencil well occupied. In my short outing I find I have a list of forty-seen different varieties of our birds, all in this small piece of

woods. Reluctantly I turn my steps homeward, wondering how many of these same songsters will be here a week later. Most of them will move along to their summer homes in the far north, and our only opportunity for seeing and hearing them until another year will have passed.

CARRIE H. ADAMS, Mass..

AMERICAN AVOCET.

A. O. V. No. 225.

(*Recurvirostra americana.*)

RANGE.

Abundant in the western part of the United States, on the plains of Dakota, Montana, and Colorado, and in the southwest. Found occasionally on the Atlantic coast. Breeds abundantly west of the Mississippi.

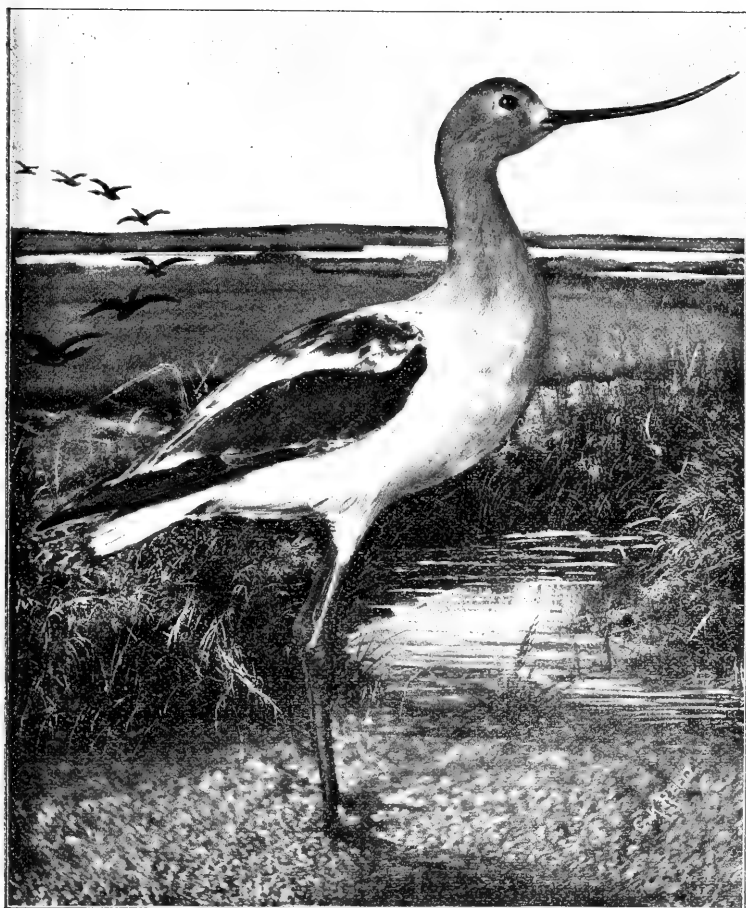
DESCRIPTION.

Length, about 17 in.; extent, about 32 in.; tail, 3.5 in. Eye carmine. Legs pale blue. Feet webbed and flesh color.

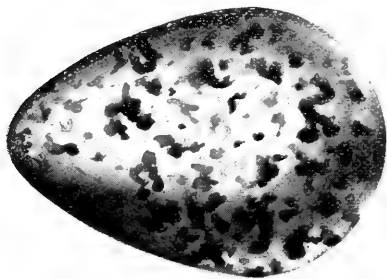
Male and female.—(In summer) Entire neck and head except portion around the base of the bill, reddish buff. Wings black except the secondaries which are white. Entire under parts, back and tail white. A black patch on both sides of the back separated from the wings by white. (In winter). The head and neck are pearl gray, otherwise similar.

NESTS AND EGGS.

The Avocet builds its nest in the tall grass about the marshes. It is formed of grass and occasionally of seaweed. In most sections where it breeds its eggs are laid in June. They are a dark greenish buff color, spotted heavily with brown. The number laid is three or four.



AMERICAN AVOCET.



HABITS.

This species is a very handsome bird. He is one of the largest of the plover family. His very light plumage makes him a most conspicuous bird, and also gives him the name of "White Snipe" and because of the color of his legs he is frequently known as "Blue Stockings." His webbed feet are small for so large a bird, and his long up-curved bill would cause the impression upon first sight that Nature had made a mistake and got it upside down. They are seen in quite large flocks, and present a fine appearance as they run daintily along the wet sand near the water's edge.

Hardly a moment but what one of the number is extending his handsomely marked wings in the bright sunlight. They appear to be very happy in their mode of living, and are continually utter-

ing a clear pleasant sounding whistle. The reason for their peculiar shaped bill appears when you see them on a mud flat feeding. Their food is mainly insects, worms, and small crustaceans. With a side-wise motion he scoops his bill along the surface of the mud and secures the food he seeks. When feeding they will wade out until the water reaches their belly, and frequently venture farther for they are very graceful swimmers. They are very dexterous also in catching the small insects which hover over the water. They are not shy birds, that is unless they are hunted persistently. They show signs of great distress if their breeding grounds are invaded. Then they mount into the air and, uttering a harsh whistle, wheel about you with their long legs hanging out behind to balance their neck.



American Ornithology.

A MAGAZINE DEVOTED WHOLLY
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Entered at the Post Office at Worcester, Mass., as second-class matter, Jan. 16, 1901.

This number will be received at the period of the year that is the most interesting to the bird student. For a short space of time, you can study the birds in their home life. Think what inveterate travellers they are. Only at home for about three months in the year.

All of our readers, who are able, ought to take a walk in the country every pleasant morning now. Between half past five and seven is the best time, and it will not interfere with your work. Those who have not been out do not realize how pleasant it is early in the

morning, and how much jollier a bird's song is at this time than it is later in the day.

No matter how many books you have, or magazines you read, you must go out and become acquainted with the birds themselves. Books are a great and necessary help, but Nature is the real instructor. Learn to know the birds by their song as well as by sight.

We have heard many expressions similar to this, "If I had only taken my camera along with me, I could have got a fine picture of —." I hope our readers will not have to make this remark. Take your camera with you always. It may be a bother, but you will not regret it afterwards.

The August number of A. O. will contain descriptions and illustrations of Yellow-billed Cuckoo, Savanna Sparrow, Pied-billed Grebe, Dusky Grouse, and Calif. Purple Finch.

Send in any items of interest in regard to any of these birds.

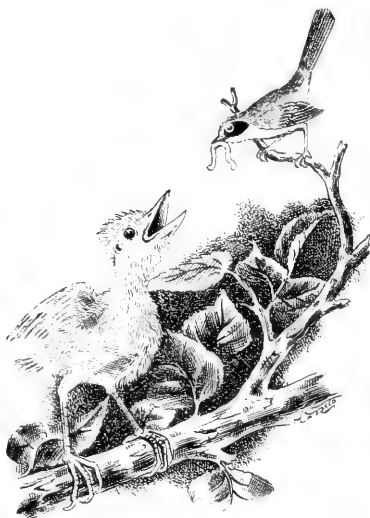
We are in receipt of a copy of "The Birds of Springfield and Vicinity" by Robert O. Morris. This is a fifty-four page, cloth bound book, and the neatest local list that we have seen. It is published by Henry R. Johnson of Springfield, Mass.

We are familiar with the plaintive call of the Phoebe, but a few days ago I heard an addition to its notes, which I had never before observed. I heard a sweet trilling melody, as a bird flew through the air above me, and was surprised, as it alighted upon a dead branch beyond, to see it was my old friend Phoebe. I wonder if others of your readers are familiar with her song.

One of the most ludicrous sights in the bird world is that of a great ungainly cowbird domineering over its tiny foster parents. The lazy cowbird does not take the trouble to build a cradle of its own, and train up its young in the way they should go, but drops its egg in the nest of some small bird, and gives no more thought or care to it. The Summer Yellow-bird often builds a floor over this egg, and then goes on with her own plans regardless of the egg in her cellar. Sometimes the cowbird comes a second time, another floor is laid, and occasionally nests are found four stories deep; but usually the stranger's egg is brooded over by the little mother, and in the course of time the rightful occupants of the nest are crowded out by the intruder.

One day last summer I heard a great commotion in a woodside thicket, and on quietly parting the branches found a young cowbird, evidently just out of the nest, for it was still unfledged, but its vocal chords were in good condition, as it ordered breakfast, and that quickly. A Redstart was in attendance and did its best to satisfy the cravings of this tyrannical infant.

Several weeks later we found a pair of Maryland Yellow-throats



busily engaged in collecting food for an older intruder of the same kind, which was four times as large as his foster parents. The little yellow-throats flew back and forth from the ground to the telegraph wire where the lazy bird sat, in vain attempts to quiet its clamor. The tid-bit brought

was speedily swallowed and the awkward gray bird, like *Oliver Twist* called for "more, more." These tiny yellow birds were a marvel of patience and industry, but alas, I fear their young ward proved anything but a comfort to them when it reached years of discretion.

MARY HAZEN ARNOLD,
Connecticut.

PARULA WARBLER.**A. O. V. No. 648.***(Compsothlypis americana.)***RANGE.**

Eastern North America, south of Canada. South in winter to Mexico and the West Indies. Breeds in favorable localities throughout its range.

DESCRIPTION.

Length, 4.5 in.; extent, 7 in.; tail 1.75 in. Bill, above, black; below, flesh color. Legs, yellowish. Eye brown.

Male.—Entire upper parts, dull blue. A patch of greenish yellow on the middle of the back. A white spot on each eyelid. Primaries and secondaries, black, edged on under web with blue. Two broad bands of white cross the wings. Tail, black, the outer webs of the feathers being edged with blue. The two outer feathers have large square patches of white on the inner webs. Generally the third and fourth feathers also show small white spots. Sides of head and neck darker than back. Chin, throat and breast, yellowish, changing to white on the belly. Breast spotted with orange brown, the spots being darker on the throat, and sometimes forming a black collar.

Female.—Upper parts paler; less white on the wings and tail. Paler yellow beneath, and spots on the breast generally lacking.

NEST AND EGGS.

They nest in moss covered trees in swamps. The nest is formed by turning up an end of the long hanging moss so as to form a pocket. This is sometimes lined with grasses or feathers, but oftener not at all. The eggs are white, faintly spotted with reddish. Four in number and laid (in Massachusetts) about May 30th.

HABITS.

This, the smallest and liveliest of our warblers, is known everywhere as the "Blue Yellow-backed Warbler." He returns from his winter stay in the South early in May, reaching Massachusetts about the 10th. These little fellows combine the habits of the creepers with those of the warblers, and as they search low bushes and apple trees for insects, they assume all manner of positions.

In the fall of the year before

they leave us, they are found in flocks, generally climbing about among the upper branches of tall trees. But in the Spring they seem to prefer low trees and bushes. Other than an occasional warning chirp, they pay little attention to you, even if you go quite near to them.

They seem to delight in climbing to the top end of the highest branch and pour forth their simple but merry, little trilling song.



PARULA WARBLER.



Near their nesting locality though, is where their song is the merriest. They nest in colonies in old extensive swamps where the trees are covered with long droop-moss. Hundreds of them sometimes occupy the same swamp. Little outbursts of song are heard on every hand.

The birds turn up the end of a long piece of moss so that it forms a sort of pocket in which they deposit their eggs. Although there may be many nests close by, they are difficult to find as the moss that contains the nest does not look any different from the thousands of other pieces hanging near by.

Another necessary adjunct to studying these birds at home is a pair of rubber boots. The moss covered floor of the swamp is treacherous in places, and any step you find yourself in water from two inches to two feet in depth. By way of variety for bird notes you may frequently hear that of the Olive-sided Flycatcher, who builds in the same locality. His is a very

loud voice, and you are aware of his presence long before you reach the swamp.

An Odd Nest.

Mr. A. E. Van Vleck, of Lansingburgh, N. Y., has kindly sent us for inspection a nest of a Chipping Sparrow, that is a curiosity. It shows

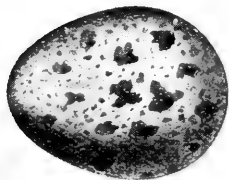
the ingenuity and patience that some of our birds have. The outside is made entirely of fine wire (about number thirty). This is twisted and interwoven in a manner that would do credit to a weaver. The next layer is made up of strings and threads woven in with fine grasses. The



inside is as usual made of horsehair. Mr. Van Vleck says "I found the nest in a plum tree. This is a great place for brush manufacturing, and the drawers throw the waste in the yard. This is what the wire part is composed of. I read of a nest that was found in Switzerland made of watch springs. I think this is fully as curious a nest, considering the size of the bird and the work required to bend all the wires."



MEADOWLARK.



MEADOWLARK.**A. O. V. No. 501.***(Sturnella magna.)***RANGE.**

Southern Canada and eastern United States, west to the Plains.

DESCRIPTION.

Length, about 10 in.; extent, 17 in.; tail, 3.5 in. Legs, brownish yellow. Eye, brown. Bill, light horn color.

Male.—Above dark brown, streaked and barred with brownish white. Top of head streaked with brown and black. Wings and tail, with the exception of the outer feathers, buff barred with dark brown. Outer tail feathers white. Throat and breast rich yellow, changing to a lighter shade below. Sides buff streaked with brown. A light stripe through the middle of crown and over the eye. That portion of the latter stripe between the eye and bill is yellow.

Female.—A little paler than the male.

NEST AND EGGS.

Nesting commences about the middle of May. The nest is made of coarse grass outside and lined with finer. It is almost always concealed in a tussock of grass. The eggs are from four to six in number, creamy white sprinkled with brown and purple.

HABITS.

Hark! A loud shrill whistle comes from the meadow. The Meadowlark is up and about his day's work long before the majority of mankind have awakened from dreamland. Many a morning have I been roused by the welcome and unmistakable call of these handsome birds. They are quite commonly called "Marsh Quails," because of a similarity in the markings on the backs of these two birds.

Once, (but before my time) I presume they had little fear of man, but having seen many of their kind fall before the gun, they have come to regard all mankind as their enemies. I am sorry to say that when I first became the possessor of a

gun, I had the same insane desire to kill all living creatures, that is common to all boys. It was my ambition to kill one of these sentinels of the field. I did not succeed then, but I remember the chase that one led me, back and forth from one end of a half mile long field to the other, until I was thoroughly tired out. I think he enjoyed it. He ought to have any way.

With the sun full on their bright yellow breast and throat, they can be seen at quite a distance. Most always, however, they keep in the taller grass and only expose their heads to view at times in order to see if anyone is coming.

Mistaking the identity of a

"marsh quail" is hardly possible. His short white tail betrays him at once in flight, as does his manner of dropping his wings when sailing as he does at frequent intervals. And to make sure that you know him, he almost always utters a peculiar chattering "che--che--chee--" as he flies away.

He and his mate, who is only a little duller in color than he, have their home in the middle of a large field, where the grass is rather

tall. Sometimes the top is arched over. They are careful to keep the location a secret, and always alight at some distance from it and approach by a circuitous route. The same tactics are used when leaving. Now is the time when the male is most jolly, and he will perch on a fence post or tree top and sing, or rather whistle, to his mate for hours at a time. His note is chiefly two consecutive, long drawn whistles with a falling inflection.

A Red-headed Woodpecker appeared in town this Spring and was an object of great interest, as he is claimed to be the first one seen here in twenty years. He is alone and his favorite perch is at the top of a dead tree by the roadside.

ARTHUR C. OGDEN,
Newton Highlands, Mass.

I wish to report the finding and probably breeding of the Burrowing Owl in Willamette Valley. They remaining here the whole year near Lebanon on Peterson's Butte. Also received a fine male specimen from within a mile of Scio, last January.

A. G. PRILL,
Scio, Oregon.

How Sabattis Got His Christmas Dinner.

DR. GEO. MCALEER.

[Continued from last issue.]

Meanwhile the air was violently assailed by the most hideous noises,—snarling, growling and fighting among the wolves over some piece of bone or shred of meat which had escaped their fury.

With a heart less buoyant than at any time since he left home he crossed the river to the opposite side from which the straggling wolves had taken their departure and hastened with all speed until he journeyed several miles away knowing that it was useless to look for any game nearer to the scene of the uproar and conflict of the previous afternoon and night.

With advancing day he became more wary and cautious. His stealthy step fell noiseless upon the fleecy snow, his keen eyes sought out and investigated every likely spot and possible lurking place where the quarry he sought might be concealed. All the knowledge and skill of the wily Indian were working at their best.

But no game came in range,—and not even an old track was found in the snow to give encouragement. Every hour brought him nearer to the settlement and his chances were rapidly growing less and less, but the Virgin's promise still buoyed him up, and the goddess Hope still spurred him on.

He needed no sun in the heavens to tell him it was past mid-day and that night would soon be at hand. He worked back toward the top of the divide where he hoped he might find some game yarded. He followed the crest of the hill with all the patience and skill of the most ardent still hunter,—every sense keen, alert, tense. But no pleasing sight of game rewarded his efforts. His heart sank within him.

Must he go home empty-handed? The afternoon was well spent and he had now but few miles to go.

But what a Christmas eve for the proud Sabattis! Fate, as cruel as stern, had deprived him of his fresh meat and Christmas good cheer. The day was spent and night was at hand. There was no use to hunt longer. He would go home.



The relation of his adventure will at least tell the tale of his success, and his fortunate escape will break the force and dull the edge of the cruel, crushing disappointment. With tired footsteps and a heavy heart Sabattis slowly descended the sloping hillside and in the early twilight he was again upon the ice of the Sebasticook. The ice along the shore was safe but occasional reaches of open river were discernible where the current was swift.



He hastened on,—but was it the haste of despair? Sabattis would have said no! He will yet succeed; he cannot now see how,—but somewhere, somehow. “Sabattis will succeed!” “Sabattis will succeed!” kept ringing in his ears,—and to him the promise was as real as life itself.

The twilight of early evening deepened into the darkness of night and he hurried on.

The great full moon rose resplendent in the east, and the outlying cabins of the village came into view. Already the windows of the little chapel are aglow with light, as loving hands of old and young make it more beautiful with a wealth of fragrant evergreen as a fitting decoration for the midnight Mass which is soon to usher in the feast of the Nativity.

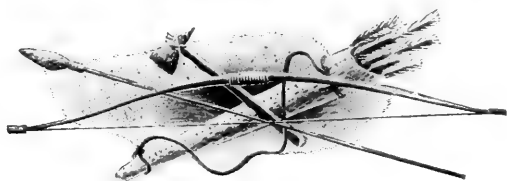
The open channel in the river swept in close to the shore.

But hark! what music is that in the air? The honking honking of a flock of wild geese on their way to their winter home in southern waters fell like sweetest music upon the ear of Sabattis. He crouched low in the

bushes. Down pitched the flock into the open waters for the night within easy range.

They had scarcely alighted when the sharp twang of the bow string is heard on the still night air, and there running and floundering about are two fat geese pinioned together by an arrow which passed through the neck of one and was safely anchored in the body of the other.

He cut a long sapling with which he brought them within his reach and soon there was joy in the cabin of Sabattis, and fresh meat and good cheer for the Christmas dinner.



The Defeat of Passer Domesticus.

Ah! What's that? Some new bird! I was going quietly through a small piece of underbrush, looking for specimens, when I had heard a strange sound. I crept nearer and nearer the spot whence the strange noises proceeded, looking carefully to see what was causing it. I soon saw, and was much surprised to find that it was a lot of English Sparrows, no not all sparrows, for there on a twig beside a small hole in an old apple tree was a little house wren. A battle royal was in progress. The sparrows were trying to drive the wren away, and the wren was not inclined to be driven. The wren would chase one sparrow off, then fly back to its perch, only to be confronted by others. This it repeated time after time, until I took pity on the poor little persecuted wren, and showed myself. The

sparrows flew away, and after waiting awhile to see if they were going to molest my charge further, I left. About a month later I passed the same way, and found that the wren was still in possession and had a nest and set of eggs in the tree.

W. H., Valway, Ohio.

Sunday, April 7th, while walking through a small scrubby oak grove, I flushed seven large pigeons. It being Sunday I carried no gun, and consequently cannot prove the identity of the birds. They flushed rapidly and were soon out of sight. I am certain they were not Mourning Doves, and am satisfied that they were Passenger Pigeons. This is the first record I have here for many years.

J. C. KNOX,
Jackson, Minn.

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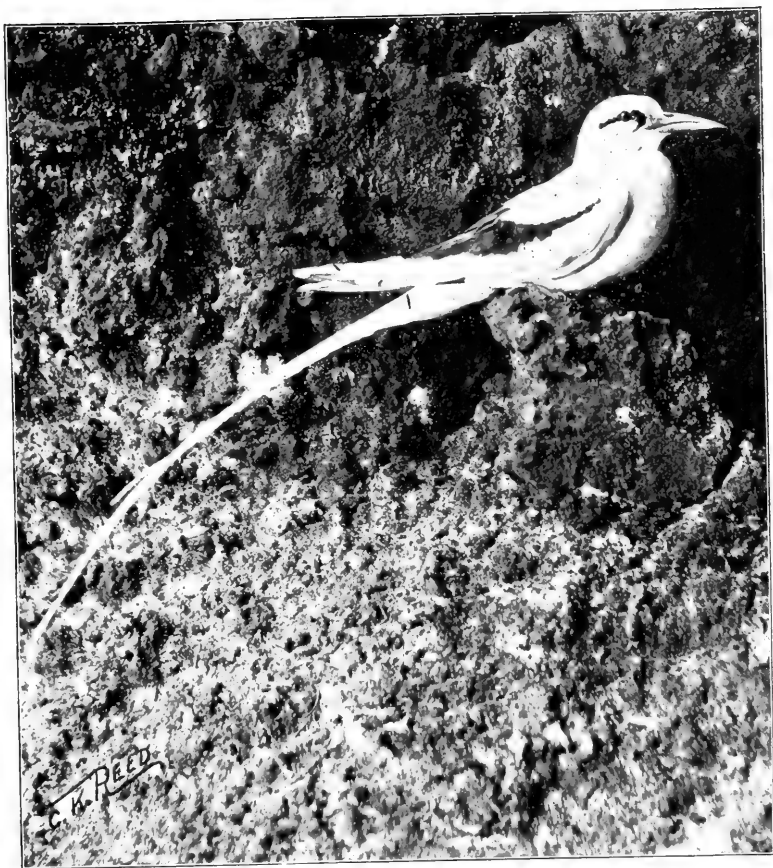
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PACIFIC COAST AVIFAUNA No. 1, "Birds of the Kotzebue Sound Region, Alaska," by Joseph Grinnell, 80 pages, 75 cents.



Vol. I.

July, 1901.

No. 7

GREEN HERON.

A. O. V. No. 201,

(Ardea virescens)

RANGE.

Entire North America from southern Canada, southwards. Migrates to South America and the West Indies in winter.

DESCRIPTION

Length, 18 in.; extent, 25 in.; tail, 3 in. Eye, yellow. Bill, greenish black. Legs, greenish yellow.

Adult.—Top of head, crest, and back, glossy green. Sides of the head, neck, and lengthened feathers in front, chestnut. Chin, white, and line down the middle of the neck is variegated with white and dusky. The wing coverts are edged with yellowish white. Plumes on the back are grayish white. Under parts mostly dark grayish.

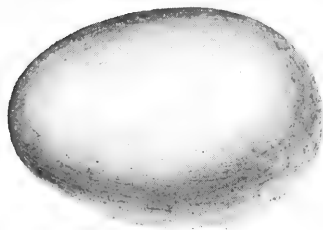
Young.—Head less crested, and the back plain greenish without the grayish plumes. Below mottled with white, brown and gray.

NEST AND EGGS.

The Green Heron nests on the branches of trees. Sometimes these are at quite a distance from the water and occasionally in an apple tree in an orchard. In some places they nest in small colonies or in a colony with Night Herons, but most often they will be found to breed in pairs. The nest is a loosely made structure of sticks and twigs. The eggs are pale greenish blue and vary from three to five in number. They lay from the middle of May to first of June.



GREEN HERON.



HABITS.

The Green Heron is well known to all who spend much of their time out of doors. He is known by all manner of names in different localities. It will be a waste of time to learn them. It is much better to know the birds by their true names. The habit of giving birds so many local names causes much trouble to the real bird student.

This is the heron that you most frequently flush from any pond hole. He always gives a shrill squawk or shriek, or series of them, as he starts his flight. His flight is easy and not ungraceful. He carries his head well back on his shoulders, and his legs hanging behind so that they resemble a lengthened tail feather. The description of this bird given by two casual observers would be apt to disagree in one particular, the length of his neck. If you see him only when flying or running along the edge of a stream you would think that he had a very short neck, for he keeps it drawn well back on his shoulders. In reality it is very long for the size of the bird. Just watch one when he lights on top of a tree after being started from a pond hole. His body is scarcely visible but his neck is extended to its full length.

He is an expert at fishing, using his bill for that purpose. If you are fortunate and can secure a good place of concealment without his seeing you will see how he gets his meals. You will see him standing in a shallow pond or brook, his eyes fixed steadily upon the water. His head is



GREEN HERON NEST.

drawn back ready to strike, and few fish escape that long unerring beak. They appear to hunt alone and seldom are more seen together when thus engaged. Frogs are a favorite article of food with them, and they will stand in water up to their knees for hours at a time patiently waiting for one to rise within striking distance.

Nearly every boy, and man too for that matter, considers herons good game for his gun, and never misses a chance of getting one. Naturally under these circumstances the birds are not very tame. Still if they think there is a chance to escape observation they will hide rather than fly.



YOUNG GREEN HERONS ON NEST.

Photo by J. B. PARDOE.

There is one heron in particular, that I always find in or about the same small pond. There are a few small rushes growing in this pond, and he always tries to pass himself off as one of these. He will stand beside them with his body erect and head and bill pointing straight upward. No one unless he was looking expressly for him would ever notice him. I have walked entirely around the pond and passed within six feet of him, and could not see that he moved a muscle.

The illustrations of the nest and eggs and the nest with young birds photographed by Dr. Pardoe give a good idea of the appearance of a Green Heron's nest, and of the young birds. A more ungainly, awkward, and shabby looking lot of nestlings it would be hard to find. Only those who have tried to obtain photos of nests situated as these, can begin to realize

the difficulties encountered. To climb a tree with your 5 x 7 camera, and find a suitable position from which the nest can be viewed to good advantage, and focus the camera and get a good picture, is a feat to be proud of. I think that the majority of people do not give the credit due those who obtain good pictures under such circumstances.

AMERICAN WHITE PELICAN.

A. O. U. No. 125.

(*Pelecanus erythrorhynchos*)

RANGE.

Abundant along the Gulf coast, in the Mississippi River valley, and on the California coast. North in the interior of the country to Manitoba in Canada. South in winter to Mexico and Central America.

DESCRIPTION.

Length, 5 ft.; extent, 9 ft.; tail, 6 in. Eye, varying in color from white in the adult birds to brownish in the young. Bill and feet usually yellow. During the breeding season the bill and feet are reddish. The pouch at this time is white on the fore part changing through yellow to red at the base. Plumage above and below in white. The primaries are black. The lengthened feathers on the back of the head and on the breast are tinged with golden.

NEST AND EGGS.

These birds nest in large colonies on isolated islands. The nests consist of a number of twigs laid on the top of a small heap of sand. The eggs are laid soon after the first of May, and from then until the middle of June. They usually lay two eggs, although sometimes three or four are found in a nest. The eggs are dull white, but soon become nest-stained and a dirty yellow color.

HABITS.

These immense birds are among the most interesting that we have. Owing to the peculiar pouch that is suspended from the lower mandible, they are objects of curiosity wherever seen. This pouch is made of very thin skin and lined with slender fibres. The birds have the power of expanding or contracting it. When expanded it has a capacity of three or four quarts.

They live on fish. The smaller ones they catch in their pouch using it as a dip net. When they have got a number of fish in its interior they close the bill, raise the head and contract the pouch, causing the water to run out through the corners of the mouth. Large fish they catch by quickly thrusting their head beneath the water and seizing the unsuspecting prey in their bill. As they swallow their food whole they must of course have a fish head first. In order to get him in this position they toss him in the air and catch him as he comes down.

Not only is their pouch an object of interest but they have other peculiarities as well. During the breeding season only they have a peculiar appendage on the upper mandible. The bill at other times is perfectly smooth along the top, but at this time, a high, thin, horny, but flexible comb grows about midway on it. This is of a dull whitish color. No one yet has been able to give a satisfactory reason for the appearance of this appendage.

A few of the pelicans remain on the Gulf coast during the summer, but the majority go farther north and make their homes about the lakes in the Dakotas, Utah, and California, or in the interior of Canada.

During migrations they fly at great heights, and like the Canada Goose their voices can be heard long before they appear in sight, or when they are at such an altitude as to be almost invisible.

It is said that during migrations the Pelicans use their pouch as a lunch basket to carry provisions for the journey. They sometimes cross belts where the ponds are all frozen and unless this is so, they would be greatly inconvenienced by the lack of food. Some ornithologists have objected to this theory on the ground that a Pelican could not fly with so much weight in his pouch as it would destroy his balance. This objection cannot hold on these grounds though, as in order to restore his equilibrium he would simply have to carry his head a little farther back.

Early in May I noticed a pair of House Wrens about an old brush heap near the house, and thinking that possibly they might build in there I placed a couple of one gallon paint cans in the brush good and firm. Only a few days after I had the pleasure of seeing one of them being occupied, and both Mr. and Mrs. Wren busy in moving in their household goods, and making all preparation for spending the summer. Two weeks later there were six pretty pink spotted eggs in the cottage and we hear and see the pair of birds about their homes every day.

HENRY JOHNSON, Massachusetts.



AMERICAN WHITE PELICAN.



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A Week With the Birds.

Not long ago a friend and myself spent a week among the birds in a beautiful little village in the Connecticut valley.

This Bird's Paradise was profusely decorated with countless trees laden with apple, pear and peach blossoms in all their sweetness; their pink and white beauty enhanced by the emerald background of velvety grass. The hill tops were clad in many soft shades of green; the delicate leaves of the white birches, the darker maple leaves, the elms and oaks just putting forth their tender foliage, with here and there a tall cedar lifting up its dark green arms, and the creamy blossoms of the dog-wood, made a picture never to be forgotten, of a world clad in beauty.

Into the midst of this loveliness came the birds. The reception began at an early hour. Ere the first rays of the sun had appeared, a gentle twittering was heard, growing louder and louder as the day dawned, until the air seemed alive with melody.



I think Mr. and Madam Robin were the first arrivals. (Bright cheery fellows. I was glad they were invited.) I heard their soft chirpings, which soon swelled into a chorus of good cheer as they were joined by "their sisters, their cousins, and their aunts."

Then the greetings of the Brown Thrasher were heard. A long tale he had and it was sweetly told. The Vireos were there in full force, very dapper and slick; the Red-eye, the White-eye, the Warbling, and the Yellow-throated. They found some flexible branches, which made delightful swings, on which they swayed to and fro, pouring forth thrills of music, stopping occasionally for a lunch on a fine fat worm, then hiding behind a leafy screen and calling, "Here I am. Here I am. Here, see me, here, here." The Bluebirds came, too, with loving words singing of "Bermuda, Bermuda." The Chewinks kept urging "Drink your tea. Drink your tea," and "Sweet birds sing. Sweet birds sing."

The Goldfinches, arrayed in new gowns of yellow satin and black, cried "Hear me, dearie. Hear me, dearie." Then curved through the air with sweet songs. Hilarious Bob. O. Link and Mrs. Link were there and helped to keep the company in good humor. Our old friend Phœbe was present, too, with her Quaker cousins, kingbird, pewee, and chebec. Mr. Chebec talked incessantly so that he grew rather tiresome. The Flicker and Hairy Woodpecker found drums and beat vigorous tatoos when not engaged in the study of Entomology. The Maryland Yellow-throat, looking through his black spectacles, seemed to marvel at the wondrous transformation which had been wrought in a few short weeks, and could only exclaim, "Witchery. Witchery." Little Jenny Wren sputtered and scolded all day long, but no one minded her. But even at a bird's carnival, discipline must be maintained, for at nightfall we heard a sad voice reiterating, "Whip-poor-Will. Whip-poor-Will." What poor Will's misdemeanor was I knew not, but later in the season we may learn that Will was not the real culprit after all, but that "Katy-did" it.

Time permits of but a brief description of some of the costumes worn on this occasion. The gentlemen of the party wore the brilliant colors. Bright yellow and orange seemed very fashionable, and were prominent in the garbs of the Goldfinch, Summer Yellow-bird, Black-throated Green Warbler, Golden-winged, Prairie, and Blackburnian Warblers, Chat, Flicker, and Yellow-throated Vireo, while the Tanager seemed to come direct from the golf links in his flaming scarlet.

The Crows, Grackles, and Red-wing Blackbirds came in suits of glossy black. The Indigo Bunting looked charming in a beautiful suit of dark blue. The Chewinks each had a fresh white vest, chestnut waist-coats and black and white coats. Mr. and Mrs. Catbird's suits of slate fitted perfectly, without wrinkle or crease, and the Orioles were dazzling in

black and gold. Mr. Grosbeak had on a new neck tie of bright red, which was very effective against the soft white of his waist coat, and with his black velvet cap, and black and white coat, presented a contrast to his mate in her quiet colors. Even Mr. Partridge stalked forth with great dignity and deliberation, conscious of the admiration which the beautiful ruffle around his neck elicited. The blue and white of the Blue Jay were very becoming, but alas, his clothes were better than his manners, in fact, he had no manners at all. Last and not least in the brilliant assembly, came the Hummingbirds, "winged gems," darting about in great haste, not one whit behind the greater guests in beauty of attire. We enjoyed meeting over fifty of these songsters. There were others among them whom we desired to know, but they were very shy and kept themselves out of sight in sheltered nooks, from which we could occasionally hear their soft whisperings and catch a glimpse of color.

Time forbids more than the names of other distinguished visitors: The Black and White Warbler, the Black-poll Warbler, with the Nuthatch and Chickadee. The English Sparrow was there of course, with the Song, Field, White-throated, and Chipping Sparrows as well. A large flock of Cedar Birds, a Quail, Redstarts, a Cuckoo, sweet voiced Wood Thrush, and Oven-bird, with hawks, pigeons and swallows, swelled the numbers present.

When we left them, the Carnival was still in progress, and the happy guests were pouring forth their joyous carols of praise with unabated vigor.

MARY HAZEN ARNOLD, Conn.

SCARLET TANAGER.

A. O. U. No. 608.

(*Piranga erythromelas*.)

RANGE.

The United States and southern Canada, east of the Plains. They migrate in winter to the West Indies, eastern Mexico, and Central America, returning to their breeding localities about May 15.

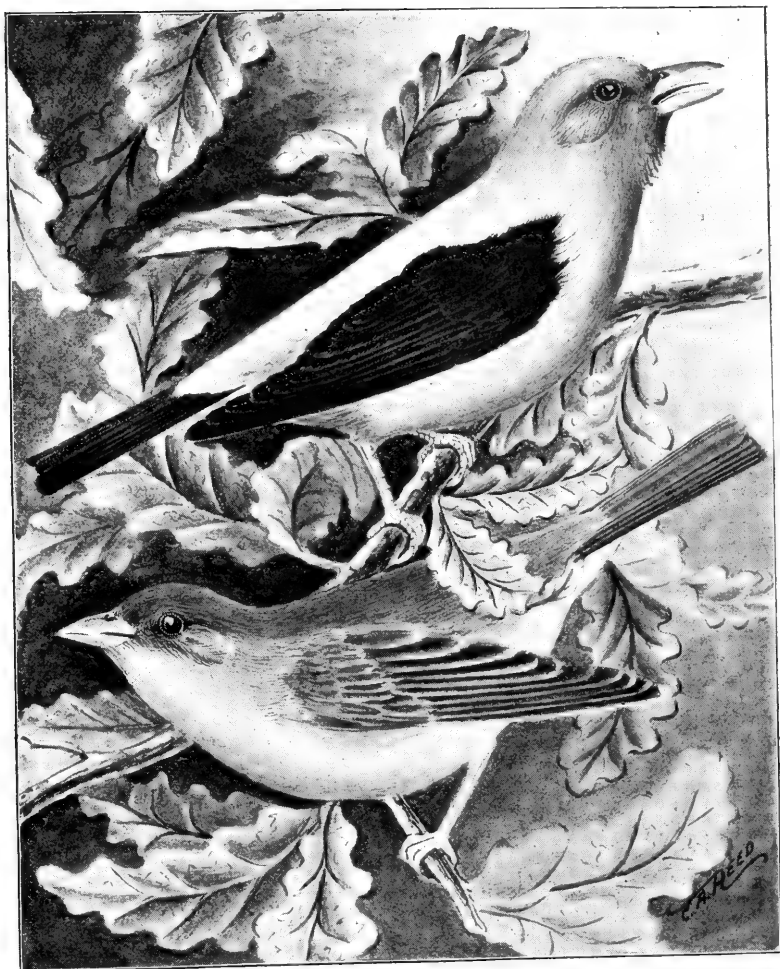
DESCRIPTION.

Length, about 7 in.; extent, 12 in.; tail, 3 in. Eye, brown. Feet and bill yellowish horn color.

Male.—(In Spring) rich scarlet. Wings and tail, black. (In Fall) like the female.

Female.—Back, olive green. Below, olive yellow. Wings and tail, dark greenish brown.

Young.—Like the female. The male when changing to the scarlet phase is patched with red, yellow, green, and black.



SCARLET TANAGER.



NESTS AND EGGS.

The nest is completed and eggs laid about the latter part of May. It is placed not very far from the ground on a horizontal limb. It may be in any variety of tree, but one near the edge of the woods or a clearing is generally used. Sometimes they will build in an orchard. The nest is made of twigs and bark, lined with grasses and rootlets. It is rather loosely constructed. The eggs are three or four in number, of a greenish blue ground color, spotted and blotched with reddish brown, rather most at the larger end.

HABITS.

"Cher-ee, cher-er-r-r, cher-ee-er-r-r," a clear warbling whistle comes from the depths of the woods. You pause and listen. Soon it is repeated. Perhaps this is a new note to you. Guided by the strange sound which is heard at frequent intervals, you go forwards. Finally you come to a stop under a large pine that raises its head proudly above the surrounding oaks. You walk about it looking closely along all the branches. Surely the sound comes from this tree, but where can the bird be. Ah! You do not know him. Just step back a few paces and look at the very top of the tree. There with head raised just giving forth his unmistakable song is the bird. And what a bird! The Tropics contain many gaudy and varicolored species, but none can surpass this. The bright intense scarlet of the tanager cannot be imitated by man. Nature alone can attain such perfection. To render the red more brilliant by comparison, his wings and tail are coal black. As we have so good an opportunity, we will watch this bird awhile. For some minutes his song rings out at regular intervals. Then doubtless thinking he is wasting too much time, he descends to the top of an oak, and goes to work. He is one of the most persistent destroyers of caterpillars that we have.

As if realizing there is danger in his bright plumage, he does not hop about as most birds do, thereby rendering themselves conspicuous, but perches quietly in one place until he has consumed everything edible that is within reach, when he flies to another branch. This accounts for the Tanager being called a rare bird in many localities, when they are in reality quite common. His brilliant coat, which would attract attention to him at once if he were in motion, is scarcely noticeable among the green leaves if he is quiet. The Tanager, and all other birds, too, should be hunted by ear rather than by eye. His note can easily be heard and recognized at a distance of half a mile, whereas you may pass right by and not see him if your ears are not open to the bird music about you.

But come back to the bird that we were watching. We notice that he has been gradually approaching a clearing. Now he appears to notice you for the first time and instead of hearing his cheerful song, you are greeted

with a deep, "chip, churr-r-r." He seems quite excited now and continually utters this new scolding note. Perhaps we can find the cause of his anxiety. Just scan closely the lower limbs of the surrounding oaks, and about midway of the branch on one of them we will see an ordinary appearing nest composed of twigs and grasses. This is the Tanager's home, and he always stands ready to guard his yellowish green colored mate and the four spotted blue eggs that she is sitting on. I have seen him repeatedly carry her choice worms or caterpillars while she was on the nest. One of the prettiest sights I have seen in connection with bird life, was of six or eight male Tanagers feeding on a freshly ploughed field. These Tanagers, together with several Blackburnian and Magnolia Warblers that were in the field at the same time, in company with many other varieties, furnished the most color to a bit of plowed land that it has been my fortune to see.



Photo by GEO. C. EMBODY.

Mr. C. E. Hoyle of Millbury, Mass., says that, "after a severe storm he once saw a flock of about four hundred male Tanagers in a field. They were completely exhausted. This was about fifteen years ago." It must have been a grand spectacle, though they were in a pitiable condition and probably many perished.

At no time during the past twenty years has there been as many Tanagers about here as this season. I frequently hear them in the center of the city.

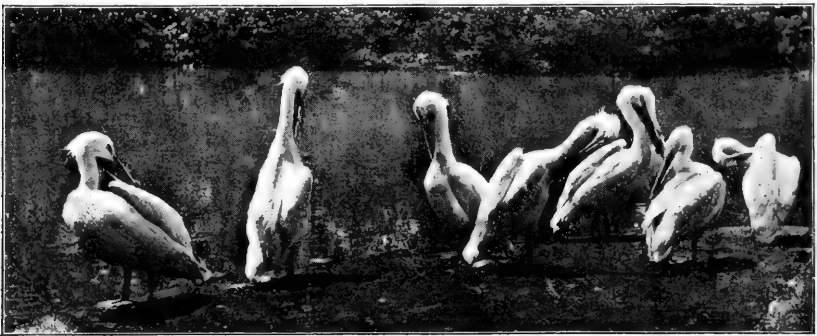
A Pelican Pond.

There are many features at the National Zoological Park at Washington, which attest the aim and desire of the superintendent to provide for the animals under his charge, the natural environments to which they have been accustomed in their wild life.

Not the least of these is the Pelican Pond, situated near the entrance to the grounds. While covering only a very limited area of territory, it is nevertheless an admirable illustration, on a small scale, of the advantages attained by restoring to animals in captivity, the surroundings to which they are adapted by nature, and of making these as near like their original haunts as possible.

This pond has been so constructed as to make an ideal summer home for a large flock of American White Pelicans, owned by the Zoo, showing to the visitor a glimpse of the life history of these birds that could not well otherwise be obtained. The margins of the pond on one side are sandy and bare of foliage, while on the opposite side, a dense growth of bushes overhangs and fringes the banks to the waters edge, and offers abundant shade. On the cleared side, several artificially constructed sand-bars project out into the pond, and on these the birds, when tired of swimming, rest and preen in the sunshine.

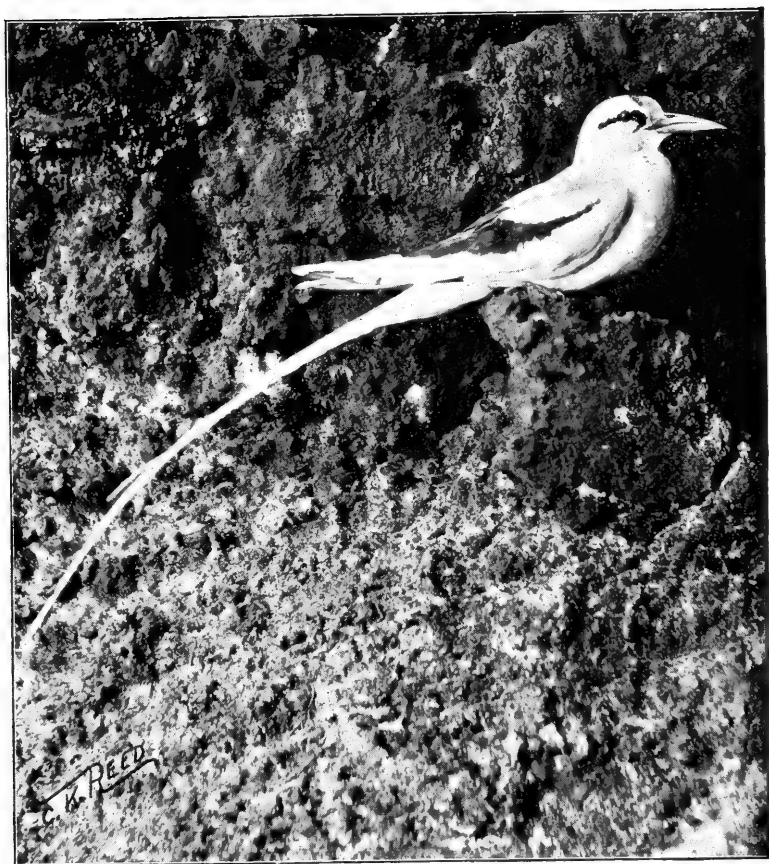
They seem perfectly at home and happy in their exile, fishing in small squads, swimming and diving, or resting on the sand bank, and living in every way the same mode of life as they are wont to live in their native haunts.



PELICAN POND, Washington Zoological Park. Photo by J. W. DANIELS, JR.

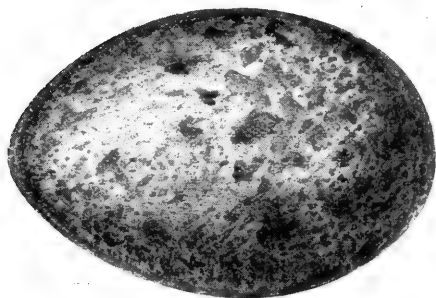
They have become quite accustomed to man and show no fear whatever when closely approached, allowing one to get within a few feet of them, thus offering splendid opportunities to the naturalist photographer. During summer afternoons, when shadows fall on the lake, they present a beautiful picture as they sit in groups on the sand bars preening, their snowy plumage contrasted with the green of the landscape, and their every movement reflected in the crystal mirror of the lake.

JNO. W. DANIEL, JR., Washington, D. C.



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YELLOW-BILLED TROPIC BIRD.



YELLOW-BILLED TROPIC BIRD.**A. O. V. No. 112.***(Phaeton flavirostris.)***RANGE.**

From Florida and the Bermudas southwards.

DESCRIPTION.

Length, about 28 in.; extent, about 36 in.; tail, 16 in. Eye, brown. Bill and feet, yellow. Toes, black.

Adults.—White tinged with rosy on the under parts and the lengthened tail feathers. There is a black crescent before the eye and continuing through it. A black band crosses the wing coverts and the inner secondaries. The inner webs of the outer primaries are black. The two middle tail feathers are lengthened.

NEST AND EGGS

The eggs are generally laid on the bare rock in holes or crevices in the cliffs. Sometimes moss and a few sticks are gathered together, but oftener there is no nest at all. The single egg has a white ground, but this is generally concealed by the numerous spots of chocolate brown.

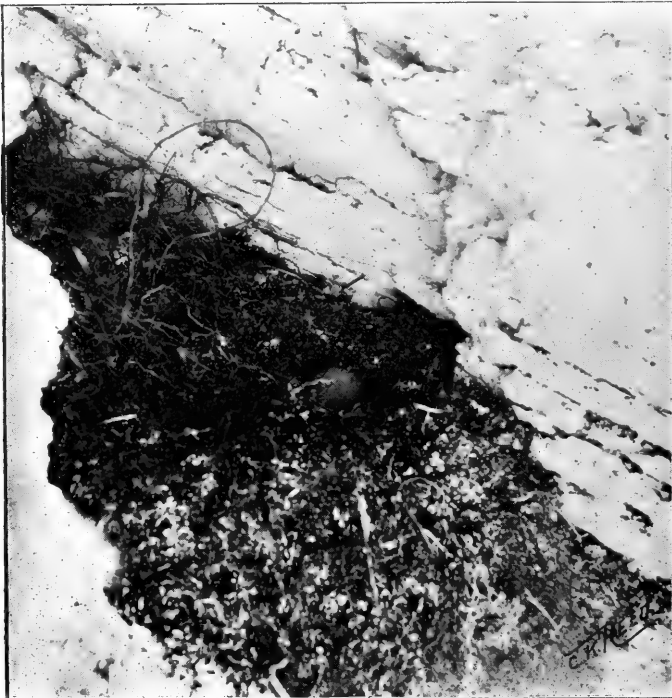
**YELLOW-BILLED TROPIC BIRD NEST.**

Photo by A. H. VERRILL.

HABITS.

The Yellow-billed Tropic Bird, although found throughout the West Indies and in fact a large portion of Central and South America, is in no locality so abundant as in the Bermudas. Here, protected by wise and strict laws, they come annually to breed in thousands. Arriving during the latter part of March they at once enter on domestic cares and as soon as their young are able to accompany them leave the little mid-ocean islands for another season. For the few months during which they remain, they fill the air with their cries, and one can scarcely look seaward in any direction without seeing a score or so of the beautiful creatures flying rapidly to and fro or resting gracefully on the azure waters, with tail perked upward to protect the slender plumes.

When a few months ago I sailed for Bermuda, I determined to secure photographs of the Tropic Birds from life. This, I supposed, would be an easy matter to accomplish, as I had repeatedly heard of their tameness and abundance. I found the birds plentiful enough and every rough and jagged limestone cliff had one or more pairs breeding therein. Even close to houses and settlements, when suitable holes or crevices were to be found, they laid their handsome, chocolate-colored eggs, apparently oblivious of the proximity of man.

It seemed, however, as if my hopes of photographing them would be shattered, for nest after nest was discovered, only to find that in each case photography was out of the question. In one, the hole would be so deep and narrow that only the long tail of the sitting bird was visible. In another, the hole would be large and the inmate clearly discernible, but in such heavy shadow that only a long, time-exposure would be possible, to which the parent strongly objected, ruffling her feathers and squalling at the queer instrument at the door of her snug home. In still another, where light and all else was favorable, it would be necessary to cling to the perpendicular rock by fingers and toes, and setting up a camera was out of the question, while by far the greater number of nests were absolutely inaccessible.

The birds sat very close, however, fighting and biting when disturbed and showing not the least sign of fear, returning immediately to the nest when removed. Of course it would have been possible to capture a bird and securing it, take a photograph while in captivity, but that was not what I wished, and day after day I visited fresh nests in the hopes of finding at least one suitable for my purposes.

At last the hoped for opportunity arrived. On the shore of a small uninhabited island I found a bird sitting quietly on her egg in a wide, shallow crevice at the base of a cliff. Here I could set up my camera and focus at leisure, while the inmate of the hole watched operations with ap-

parent interest. When everything was arranged to my satisfaction the exposure was made, and then, much to my chagrin, I found my holders contained but one more unexposed plate. Much as I desired to take two negatives in order to be sure of good results, I was forced to content myself with one, the last plate being used for the nest and egg.

Imagine my disappointment when I developed the plates to find that both were fogged by the dampness of the climate, and while the nest and egg were not beyond repair, the bird on the nest was worthless. This nest was rather remarkable, being well built of sea-weed and Sargassum, whereas usually the egg is laid on the bare rock.

A few days later I received a fresh shipment of plates and again set forth.

During the interval, however, I had learned much in regard to the habits of my intended subjects. I found among other peculiarities that whereas from about 9 o'clock until noon they were constantly visible, at other portions of the day they disappeared. An investigation disclosed the fact that at these times they retired to their nests, where they dozed and slept. Sometimes both birds would retire to the nest, but usually the female would stay on the egg while her mate took up quarters near by, either in a shallow cavity or beneath some overhanging or projecting rock. Moreover I found that at these times they were exceedingly loth to take flight, and even when lifted from their feet and tossed in the air, they would tumble clumsily to the rocks, and flapping and fluttering about, again scramble to a satisfactory position, where blinking stupidly, they resumed their siesta.

With this knowledge I immediately directed my steps to an overhanging cliff, from whose face a number of great masses had fallen, and which, resting in the water below, formed a sort of natural causeway. Here, as I expected, I found the female sitting on the solitary egg, while her mate dozed nearby. Without the least trouble the camera was set up on the fallen rocks and several perfect negatives of the male secured, as well as a very satisfactory one of the female on her nest.

The Tropic birds I found did not feed exclusively on fish or marine life, but were very fond of land snails, which they obtained along the edges of the cliffs, and also on beaches, where they were often lying in winrows cast up by the tide. See urchins also furnished a considerable portion of their diet.

Although the pairs are always together when on the nest or rocks, when flying about they almost invariably fly in groups of four or five. Their power of flight is very great and they daily travel over a hundred miles out to sea and return.

A most remarkable effect is produced when these graceful birds are fly-

ing over the shallow water. The sunlight reflected from the snow-white bottom through the wonderfully colored water, giving their breasts and under side of wings a most delicate and beautiful sea-green color.

A. HYATT VERRILL, New Haven, Conn.

Albino Scarlet Tanager.

While walking in the woods on Long Island early one May morning in 1899, I heard the note of a scarlet tanager, and while I did not wish to collect one, I walked a considerable distance in the direction from whence the sound came for the purpose of seeing the bird, it being always a delight to feast my eyes upon such bright plumage. Before I reached the spot the bird flew across an opening to the trees on the opposite side, and I took my course in that direction. As I approached I saw the bird sitting upon the low branches of an oak, and to my amazement, noted that it had white, yellow, and black wing and tail feathers.

I shot it, but my bird flew, wounded, across the open space to the wood at my left, and perched again in an oak tree. I walked leisurely to the spot, expecting every minute to see it drop dead to the ground. I approached quite closely, but no inclination to fly was shown, indicating that the bird was badly wounded. Not wishing to injure its plumage by shooting again, I threw a stick into the branches of the tree for the purpose of starting the bird and causing it to drop, but to my dismay it made a strong flight, taking a bee line into the dense forest and was out of sight in an instant, but I got a good glimpse of its great and peculiar beauty, and determined to spend the rest of the day, if need be, looking for it. I followed for a long distance in its line of flight, scanning every tree, bush and the ground hoping to see it again.

I marked the course of its flight by breaking twigs and branches, that it might again be identified if I wandered from it. After going as far as I thought the bird would be likely to fly, I commenced a circular search and wandered a considerable distance from the trail, which I lost.

I succeeded in finding it again by means of the marks I had left.

By following it back, a few rods to the left, I soon discovered the bird upon a tall tree and immediately shot it, this time bringing it to the ground, dead. It is now mounted and the gem of my collection of over 600 species of N. A. Birds.

That it is the most beautiful bird ever taken on this continent there is very little doubt. It even surpasses in beauty the most brilliant of foreign birds. Its variation in plumage comes from the fact that it is partially albino. The body plumage is light, transparent scarlet, while the wings and tail, instead of being all black, are a mixture of bright yellow, white, black, and pink, contrasting magnificently.

[JOHN LEWIS CHILDS, N. Y.]

Birds Roosting.

Everyone has watched caged canaries sleeping upon their perches, or seen fowls at roost at night in the hennery. Wild birds roost and sleep much in the same manner, but few observers have seen the wild bird with its head under its wing. I have never been able to watch a wild sleeping bird in the open, for the alert fellows always heard me when I tried to inspect their methods of sleeping on the perch. I believe all the perchers sleep with their heads beneath the wing, but am not satisfied that all species follow this plan. A captive barred owl was carefully watched, but I could never catch him sitting with his head under his wing, though I visited him at all hours of the day and night. All of the young of the non-precocious birds keep the eyes closed when young, and the nestlings of the robin and young sparrows, as well as young canaries keep the eyes closed most of the time until about ready to leave the nest. The young of the præcoces, however, are ever alert, and I have noticed young of the killdeer, plover and ruffed grouse, not more than two days old that used their eyes, and feet too, to good advantage.

Most birds have practices in roosting and these are but slightly varied in a species. Strangely enough, many ground species, as the Turkey, although nesting on the ground, make a practice of roosting in trees. Woodpeckers, Nuthatches, Wrens and several other species which build in cavities often roost in holes. The smaller birds select the evergreen as a good place to roost in cold weather, and I have frequently routed dozens of sleepers from these situations in my investigations after dark. The chimney swift is always gregarious in its habits when not engaged in the duties of nesting, and in the spring and summer may be found roosting in large chimneys, sometimes several hundred in one place, all hanging onto the sides of the interior of chimney like a flock of bats, for which they are frequently mistaken by the ignorant. Ducks and all water birds that I have been able to learn of differ in their choice at times. At certain times ducks sleep upon the water, and again they range along the shore, or as the wood duck, roost in trees, particularly in the nesting season. The smaller shore birds roost in compact groups upon the shore, at least this is so when they flock at the time of migrating. The Bob-white roosts in family groups in the form of a circle on the ground with the heads presenting outward.

MORRIS GIBBS, Mich.

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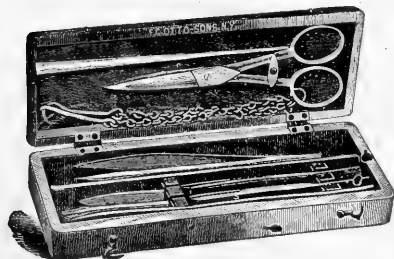
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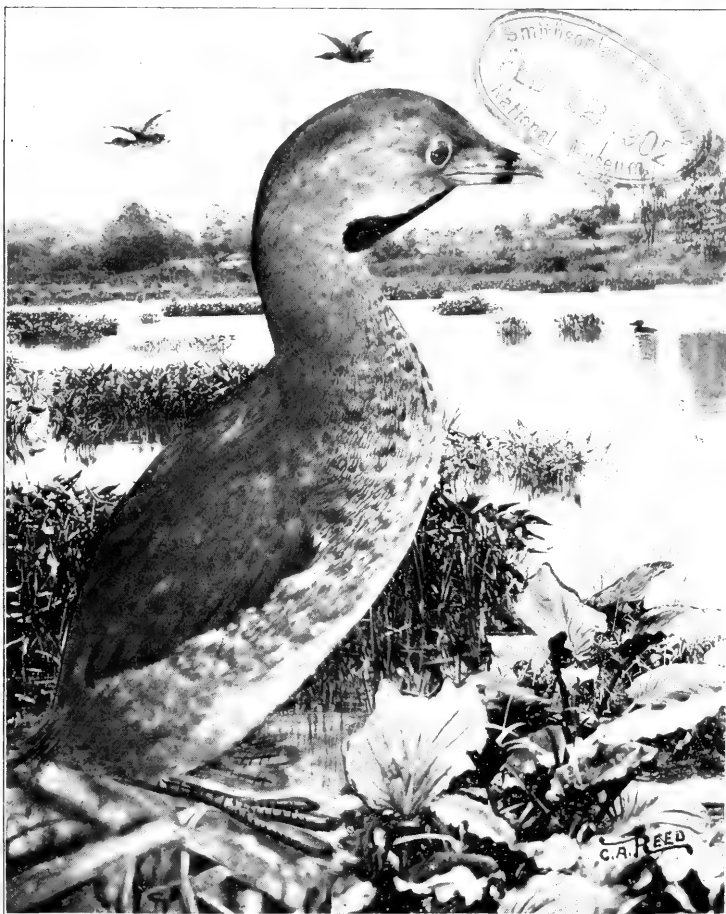
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Vol. I.

August, 1901.

No. 8

GRASSHOPPER SPARROW.

A. O. U. No. 546.

(Ammodramus savannarum passerinus.)

RANGE.

Eastern United States and Southern Canada, west to the Plains, south in winter to Florida, Cuba and Central America.

DESCRIPTION.

Length, 5 in.; extent, 8 in.; tail, 2 in. Feet, flesh colored. Bill and eye, brown. Entire upper parts variegated with black gray yellow and chestnut. The crown is nearly black with a brownish yellowish stripe through the middle. A line of buff extends over the eye. Primaries and tail feathers dusky with light edges. Below buff changing to whitish on the belly. Edge of wing and spot on cheek yellow.

NEST AND EGGS.

The nest is on the ground and concealed by a thick tussock of grass; it is frequently placed along side of an overhanging stone. It is composed of grasses. The eggs, four or five in number, are laid about the middle of May. They have a clear white ground color, spotted with reddish brown, chiefly at the larger end.

HABITS.

The Grasshopper Sparrow, or Yellow-winged Sparrow by which name it is often known, is one of our commonest birds in the East. All of us have seen him. He loves the green fields of clover and the sunshine of the open. He loves the ground rather than the leafy foliage of the woods. Among the grass he is at home. His short wings teach us that he is not a species given to much flight, and his short tail indicates that he is not



YELLOW-WINGED SPARROW.



decidedly a perching bird. We all know that he is distinctively a ground bird.

In the meadows, green with grass and weeds, where the land is rather dry, is his favorite resort. When flushed from his grassy coverts, he rises with a quick rather rapid flight, flying low over the grass tops, usually, not to go very far before alighting. Oftentimes he perches upon fence posts, but more often upon grass stems or a single rock in the middle of the field.

His song is a twittering and rather pleasing little ditty. It closely resembles the shrilling of certain grasshoppers, but if one will listen closely he will detect in the prelude and ending a faint warbling note. On account



of the resemblance of the squeaking part of its song to the noise made by grasshoppers, we understand how it came by its very appropriate name.

It is a sociable bird, loving the company of its fellows, and wherever one pair is noted there are likely to be others in the neighborhood. Mr. Langille tells as in his "Our Birds in their Haunts," that this bird shows a very jealous disposition as regards his singing habits. He says; "Unpretending as this song is the singer is, nevertheless ambitious, for on hearing another of its species singing near by, it will fly to it, and, diving into the grass, soon put it to silence. The nest is made entirely of dried grass tufts. The nesting season is late in May. In Virginia it is exceed-

ingly abundant, its presence greatly enlivening the green fields along the slopes and meadow lands. The accompanying illustration is kindly furnished by Mr. Percy Shufeldt, and is a good likeness of the species.

JNO. W. DANIEL, JR., Lynchburg, Va.

A New Occupant.

Perhaps the least sociable of our feathered acquaintances and even the most retired of his own family, is the Yellow-billed Cuckoo, commonly known as the "Rain Crow." Yet in spite of his secluded habits, where can we find a more valuable friend, one that is more deserving of our admiration and protection than he?

It is in regard to one of his peculiar habits that I wish to call attention, peculiar, yet I fear, not wholly abandoned by some of his higher neighbors, that of his failure to provide a well built home for his mate and young. The fact that the nest of the Yellow-billed Cuckoo is formed of twigs and small branches loosely thrown together, forming a mere framework upon which the eggs lie is probably known to most of his admirers, while a few even accuse him of allowing his young to be reared in the home of some unfortunate, who may have taken up his abode near by. This latter lack of parental love, however, is very rarely practiced by "*americanus*."

While out one fine morning listening to the various songsters as they poured forth their sweet notes from every bush and tree top, I chanced to pass under a small box elder, in which the year before I had discovered the nest of a Little Blue Heron. Glancing carelessly upwards, merely to ascertain if it was yet in the old position, I noticed a flutter of brown dart from the nest and disappear among the leaves of a tree near by. In a moment more I saw our friend "*Coccyzus americanus*" fly quickly to the tree beyond and realized that a Yellow-billed Cuckoo had made his home in the old nest. On climbing to it I found two young cuckoos and one egg lying upon the old twigs, which apparently had not been changed since the Blue Heron placed them there the year before. The cuckoo had undoubtedly decided, since he had found a nest which answered his purpose, that there was no need of exerting himself more in the building of a new one; and therefore proceeded to rear his young in the heron's nest.

SHERIDAN R. JONES, Vermillion, S. D.

Canada Grouse (Spruce Partridge) Nest.*Dendragapus Canadensis.*

While following the trail from B. Pond to Upton, Maine, I was fortunate in finding the nest of the Spruce Grouse. It was placed on the ground within five feet of the trail, where men were passing nearly every day. It was on a knoll (not in dense swamp) being placed under a small fir balsam (*Abies Balsamea*) and resembling very much the nest of a Ruffed Grouse (*Bonasa umbellus*) both in the location and the construction.

On May 13th the nest was discovered with only one egg; the next day another was added. On going to inspect and get a photograph of the nest, the male was met about two hundred yards from it. He strutted about like a turkey gobbler and was very pugnacious. It was a curious fact that every day the nest was visited, the male was found in the same place and went through the same performances. He never came nearer the nest even when we were right beside it.



On May 15th there were three eggs. The bird was on the nest but glided off when approached. She appeared to be getting tamer; on the 16th there were four eggs and the bird was very tame. On the 17th it rained all day and the bird did not add to her clutch nor was she on the nest. I was afraid she was going to desert it. It was not visited again until the 24th. The bird was incubating and was exceedingly tame, almost allowing herself to be taken off. There were six eggs. She showed great distress while we were near and remained close by, while the male did not appear. The nest was made of small twigs, bark, moss, leaves and a few feathers of the bird herself. Most writers say that this bird lays from eight to fourteen eggs, but on talking with a good many old guides who have seen a great many broods, they say they have never seen more than six or seven in a brood. I cannot agree with what they say in regard to the spots on the eggs of this bird. They are not on the surface nor do they rub off. I regret very much that the photos I took of the bird and nest did not prove successful. The weather was very bad for such work.

JOHN E. THAYER, Lancaster, Mass.

DUSKY GROUSE.**A. O. V. No. 297.***(Dendragapus obscurus.)***RANGE.**

This Grouse is found in the Rocky Mts. from Montana and Idaho on the north to Arizona and New Mexico on the south.

DESCRIPTION.

Length, about 22 in.; extent, 30 in.; tail, 7.5 in. Bill, black. Eye, brown.

Adult male:—Back and wings brownish black, finely marked in wavy cross lines with gray and yellowish. Outer webs of primaries mottled with gray and white. Rump, black, waved with whitish. Tail, black, with a broad terminal bar of gray; it contains 20 feathers and is slightly rounded. Top of head and cheeks blackish, shading to blue gray on the back of neck. Throat, white, barred irregularly with black. Breast and under parts dark slate. Feathers on the sides tipped with white and with white shafts.

NEST AND EGGS.

The nest consists of a slight depression, alongside an old log or under a small bush. This is lined slightly with a few pine needles or dried grass. The number of eggs varies from eight to twelve. The set is completed about the first of June. The eggs are of a cream color, finely spotted with brown, the spots more numerous at the larger end.

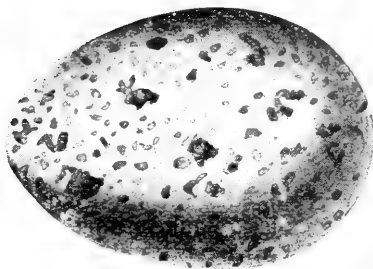
HABITS.

A great deal has been said about this bird but there is yet a great deal to be said. I have been acquainted with this species for many years past, but each year discloses something new and something interesting concerning them. Nearly every summer I find very young birds that are unable to fly, but I have never been fortunate enough to find its nest and eggs. When the young are following their mother about is the time however when the ever watchful mother is the most cautious. I will explain that in these mountains the Bob-white and even the Scaled Quail cannot prosper. Of course they are not grouse and their habits differ. The quail spend the night on the ground all huddled together and are the easiest sort of prey for the many foxes and "Bob-cats" that infest the mountains, while the grouse like the turkeys go to roost in the trees after the manner of chickens. This is all very well after the young are grown and can roost with the old birds, but when they are quite small and cannot fly a new difficulty presents itself to the mother.

Their accustomed haunts are the coniferous belts and aspen groves.



DUSKY GROUSE.



No doubt she is occasionally flushed by foxes during the day, in fact the two places last named are the stamping grounds of the fox. Generally among the trees there is very little tall grass, but in the high clearings the grass is tall and affords good cover. So here is where the young grouse are taken to spend the night and here Reynard seldom goes, and if he did he would probably be baffled nine times out of ten when he came to search for the scattered fleeing brood. So even when the young are quite small the mother is able to keep them out of harm's way. The skunk is not frequently seen as high up in the mountains so danger from that source is eliminated. During the time when the mother grouse is leading her young she varies her diet from the habitual bugs, buds, etc., to the blossoms of certain blue flowers and nice ripe strawberries. A dozen little chicks may sometimes be surprised when feeding with their mother in an aspen grove. In an instant they have disappeared, but by describing a large circle, and kicking the bunches of grass you may generally scare out one or two. They are pretty little fellows, cream color and streaked and spotted with brown. They will not live in captivity, at least all attempts to domesticate them that have come under my notice have failed. They generally die or escape.

During the mating season this grouse makes a peculiar drumming sound, as in others of the genus, and goes through many ludicrous antics in attempting to win over the fair object of his affections. Of course like nearly everyone else the grouse has enemies. I don't mean Reynard this time, but a winged enemy called a hawk. When a hawk starts a grouse on a pleasant wooded hillside, the grouse makes right down a hill as he can fly faster down hill than up; and all the while he is watching for some brush to disappear into. Well, the hawk just follows along rather closely, trying to crowd the grouse out of an opportunity to conveniently drop into a brush heap, until the pursued is forced to ascend a hill on the other side of the canon, when the hawk cuts off about half the distance by taking a straight line and lands squarely on his victim's back. A short struggle ensues but the grouse is a poor combatant. It seems as though the hawk had studied geometry, when he makes this short cut while the grouse laboriously measures off the angle.

The grouse is very agreeable to the palate, except in the early spring, when they eat the tree buds and this taints the flesh and makes it rather unpleasant to the taste. The grouse is said to spend the winter in the dense foliage of the spruce trees, where it feeds on buds and quenches its thirst from the drops of water from the melting snow. Hunting this bird is rather tame sport as it rises rather clumsily and flies for the branches of some tree, where it can be killed with almost any weapon. They are often knocked over with a stick, while sitting in the middle of the trail. This species is often known locally as the blue grouse.

American Ornithology.

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The Great-crested Fly-catcher.

In the March A. O. in the article on the G. C. Flycatcher in regard to the sentence:—"The nest is always built in a cavity in a tree," will you kindly allow me to disagree in using the word always as exempt. I have observed the following: June 4, 1894, I found a set of four eggs of this species in a Martin box at Girard, Kans. This box was 18 ft. up at the top of a pole attached to a shed in my back yard. I watched the building of this nest with glowing interest as their combats with the English Sparrows and the Martins were many. Again in 1892 I knew of a pair which nested in the corner of an unused log cabin near Aurora, Mo. These instances are no doubt quite rare but are worthy of note.

WALTER SCOTT COLVIN, Osawatomie, Kans.

Books Received.

WITH THE WILD FLOWERS (from Pussy Willow to Thistledown)—by Maud Goings. With illustrations. New York; The Baker & Taylor Co. Price \$1.00. A charming story of some of our wild flowers. In this book the author accomplishes a two-fold purpose. It is a very interesting book for an afternoon's reading and at the same time you are gaining much valuable and accurate information in regard to the habits and peculiarities of our more common flowers.

MR. CHUPES AND MISS JENNY by Mrs. Effie Bignell. Illustrated. New York; The Baker & Taylor Co. Price \$1.00. A story of the doings and misdoings of two Robins during a three years' sojourn with the author. They were rescued after being blown from the nest during a storm, and became much attached to their benefactor. The author's quaint humor and original language holds the reader's attention throughout the book.

THE HOME LIFE OF WILD BIRDS, by Francis Hobart Herrick. With 141 illustrations from nature by the author. New York, G. P. Putnam's Sons. Price \$2.50. As the title indicates this is really the home life of the birds. The author literally camped out beside the birds' nests

and took numerous views of the parents feeding and caring for their young. The results show that Mr. Herrick is an expert photographer as well as naturalist.

PIED-BILLED GREBE.

A. O. U. No. 6,

(*Podilymbus podiceps.*)

RANGE.

Entire North America from the British provinces southwards.

DESCRIPTION.

Length, 13 in.; extent, 24 in. Tail consists of a tuft of downy feathers.

Adult (in summer):—Bill bluish, encircled about midway with a broad band of black. Eye, brown; eye-lids, white. Feet, grayish black. Crown; back of neck and back, grayish black. Under parts, silvery-gray, mottled with dusky. A broad black patch on the throat.

(Winter plumage):—Bill yellowish without the black band. No black on the throat. Upper parts more brown than in summer and the feathers edged with light. Neck, breast and sides light reddish brown. Rest of under parts white. The feet on all the grebes are entirely different from those of a duck, each toe having its own web.



NEST AND EGGS.

The nest of the Grebe is a floating structure of reeds. It is made by

putting down the flags and winding them around until a platform several inches above the water is formed. During the latter part of May from 5 to 9 eggs are deposited in this nest. The eggs are a chalky greenish white but they soon become discolored by the wet mass beneath them so as to appear brownish.

HABITS.

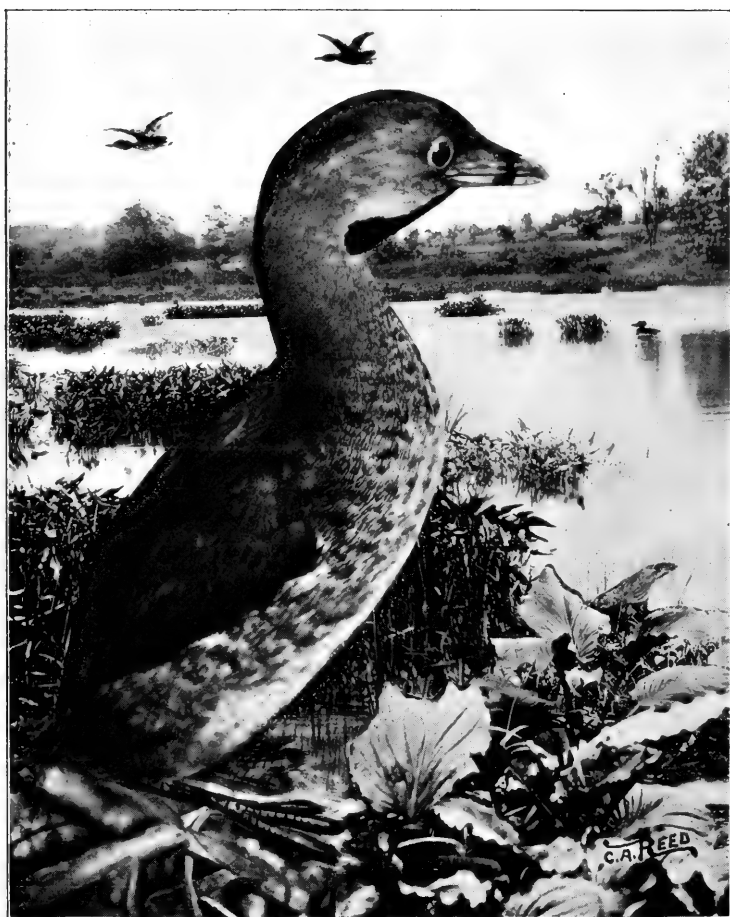
Here is one of the most peculiar of our birds. It is one of the best known too. They frequent the larger cities in great numbers especially in the colder months. They do not congregate here for protection against cold weather, in fact they are beyond having any feeling in the matter. But fashion holds sway in the cities and fashion calls the grebes hither. As a high premium has been put upon their breasts they come in great numbers. Fortunately there has been a large decrease in the city grebe population the past year, and in a few years more the grebe will be as extinct in fashion's realm as the Great Auk is in Nature's.

Whatever the grebe does it does well. In two of its attainments in particular it stands at the head of all other birds. No bird can equal it in aquatic feats. In these it has attained perfection. No other bird is quite as awkward as they are while on land. It is with great difficulty that they can walk at all. You will notice from the illustration that his legs are situated at the extreme end of his body. Although this is a decided inconvenience to him in walking, it gives him a great advantage over the ducks in quickness in diving and in speed.

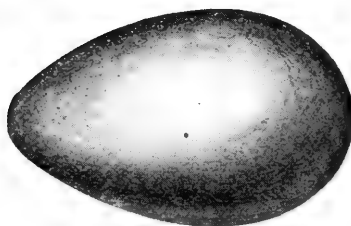
With the possible exception of the Loon I do not think there is a bird that can approach this in point of speed in swimming especially under water. And as for diving, it is claimed he will dodge a rifle ball at the flash of the gun. In my boyhood I frequently cornered these birds in a creek or small cove, so that in order to escape it was necessary for them to swim under the boat. At these times we could plainly see their mode of progression. They flapped their wings in much the same way as in flying, and this in addition to their feet is what gives them their great speed. On one of these occasions, as the grebe was going under the boat, my companion in his excitement leaped overboard clothes and all. By some accident he happened to catch the bird by the neck. We kept him a couple of days; but as he would not eat let him go.

In the summer two or three pairs may be found breeding on the same pond. They are exceedingly wary and will glide off the nest on the first suspicion of anyone's presence. Before leaving the nest they carefully cover the eggs with flags so as to conceal them from view and to protect them from the sun. They frequently leave the process of incubation to the sun during the day time and only return to the eggs at night.

The young as soon as hatched are expert swimmers and are difficult to capture. The old bird frequently gathers them under her wings and swims away from danger.



PIED-BILLED GREBE.





YELLOW-BREASTED CHAT



YELLOW-BREASTED CHAT.**A. O. U. No. 683.***(Icteria virens).***RANGE.**

The United States, east of the plains, excepting northern New England. South in winter, to eastern Mexico and Central America.

DESCRIPTION.

Length, 7.5 in.; extent, 10 in.; tail, 3.5 in. Eye, brown. Feet, brownish. Bill, black.

Adults and young alike.—Entire upper parts including wings and tail are an olive green color. The throat is a rich golden yellow, changing abruptly into white on the belly. A spot on the lower eye-lid is white, and a white line extends from the bill over the eye, as does one from the lower bill down the side of the neck.

NEST AND EGGS.

These birds nest in tangled briar thickets and in small scrubby growth. A number of pairs of the birds frequently breed in the same locality. The nest is made of strips of bark, dead leaves, and grasses. The eggs are laid about the latter part of May. They are glossy white, specked and dotted with reddish and chestnut. They are most heavily marked at the larger end. They lay from three to four eggs.

HABITS.

If ever a bird was rightly named this one is. His breast is the brightest of yellows, and if he does not chat with you, he surely has a sufficiently large variety of notes to enable him to converse in almost any language. He is remarkable not only for his variety of notes, but he has developed into an accomplished ventriloquist, and this gay deceiver practices his art upon all who have occasion to pass his abode.

Chats are quite rare in Massachusetts and I only see a very few every year. There is one side hill where for a number of years I have found them. It is covered with a new growth of chestnut trees and briars.

A few days ago I visited the place and found that they had returned again this year. I had no sooner crossed the wall separating this growth from a growth of larger trees adjoining, than I was greeted by a querulous squawk. I parted the bushes in front of me to see if I could see him. I could not. I think that he was waiting for some one to come along with whom to amuse himself.

The brush was very thick, and I made slow progress through the patch. Now a tremulous whistle, a deep chirp, a whining cry, or sounds resem-

bling the barking of a small dog would sound from the next bush, to encourage me on. Once I stumbled among the thick vines, which fact caused him to burst into a boisterous, chuckling cackle. Soon I came to a narrow open space where there were no briars. This was my opportunity. Whereas up to now I had through necessity been proceeding slowly, I rushed across this space and through the next brush as fast as I could. I was just in time and had a good view of him as he lit in the next bush. This sudden move on my part was more than he had reckoned on and I really think that he was ashamed of himself for being caught in his game of hide and seek. He gave one disgusted chirp and disappeared.



Photo by J. B. PARDOE

NEST OF YELLOW-BREASTED CHAT.

Aside from his remarkable vocal attainments, the Chat has other peculiarities in his manners that call our attention to him. During the mating season, he feels called upon to make as much noise as possible. Probably his weird uncanny notes are music to his ears and he seeks by this means to win the fair one he has set his heart on. Having been accepted his exuberance of joy knows no bounds, and he mounts skywards uttering his choicest selections, and performing the most grotesque evolutions. No other bird that I know is as boisterous in his enthusiasm as this one.

YELLOW-BILLED CUCKOO.*A. O. V. No. 387.**(Coccy^{us} Americanus.)***RANGE.**

Southeastern Canada and the United States from Dakota, Indian Ter. and Texas eastwards; also in the West Indies. They arrive in the north about the first week in May and leave for their winter quarters in Mexico and Central America soon after September.

DESCRIPTION.

Length, 12 in.; extent, 16 in.; tail, about 6 in. Eye and feet brown. Upper mandible, black; lower a bright yellow.

Above glossy brownish gray. The central tail feathers the same color as the back. The remainder black with white tips. The inner webs of the primaries are a bright reddish brown. Entire under parts white. It perches with two toes in front and two behind.

NEST AND EGGS.

The Cuckoo builds the most shabby looking of nests. It is like a Green Heron's nest on a small scale, with the addition of a few blossoms or catkins. It is placed in most any position not high from the ground. I think that the greater number of them prefer a thick tangled mass of briars or a thorn bush to a more open site. The eggs are laid about the latter part of May and the bird commences to incubate them as soon as the first is laid, so that it is not unusual to find both young and eggs at all stages in the nest at the same time. They lay three or four eggs, there generally being an interval of several days between each. They are light blue in color.



Photo by J. B. PARDOE.



YELLOW-BILLED CUCKOO.



HABITS.

For generations this quiet, unobtrusive and useful friend has been abused at the hands of those ignorant of his true character. He has been charged with never making a home for his offspring, with laying eggs in the nests of other birds, and with devouring the eggs and young of other birds. These statements are true as concerning the European Cuckoos, but our American ones are more civilized. The habits of the present species differ as much from the English representative of this family as those of our gentle, useful sparrows do from those of the imported, indolent and insolent English Sparrow. His ways are very quiet and his dismal croak is suggestive of evil. His deeds, however, are good and without his help many a farmer would gather a poor crop of apples. There are few birds that eat the hairy caterpillars that infest apple orchards and none to the extent of the Cuckoo. About the second week in May the Cuckoo begins to build his house, if a flat platform of sticks can be called a house. To make amends for the small amount of labor put in their houses they usually decorate them with a few apple blossoms or catkins.

Cuckoos have peculiar ideas in regard to rearing their little ones. They lay their eggs at intervals of two or three days, so that by the time the last egg is laid the first is hatched. Perhaps they think that in this way the task of feeding the little ones will be lightened as by the time the last egg has hatched, two of the young will be large enough to shift for themselves. The photo taken by Dr. Pardoe gives a good idea of the appearance of the young.

Mr. Jas. K. Thibault, Jr., sends the following notes from Arkansas:

"The Yellow-billed Cuckoo, 'Caw Crow,' or as it is more often called 'rain crow,' is a very common bird here. The name of 'rain' crow' is undoubtedly given it on account of its uttering its croaking sounds more frequently just before and after a rain. This habit has brought down upon it the vengeance of all the small boys as they believe that it calls for more rain and thus breaks up a fishing trip or ball game. The tree frog has the same superstition attached to it.

"One of its calls that it is very fond of uttering when in some secluded spot well hidden by the luxurious foliage somewhat resembles that of the Mourning Dove, though the time is different. 'Koo-uck, koo-uck,' repeated seven or eight times. Besides this note it has several others the interpretation of which is very difficult. As it moves about like a spirit among the green foliage constantly giving its harsh, guttural call, with its tail slightly drooped, its body in a horizontal position, and its head lowered to almost the same level it forms one of the most striking pictures imaginable. Its soft colors render it very difficult to see this bird when it is sitting still as its dark back and white breast give the same effect as that produced by seeing the white clouds through a small opening in the foliage."

A Pet Crow.

Looking one morning in June out of my window, I saw two Crows flying about a certain small tree, and making a great fuss.

Immediately I started for the woods to see what was the matter, and when I arrived there the Crows flew away, and I saw a young Crow sitting on a branch of this tree. It sat on the limb and gazed at me, and I walked up and caught it in my hands. Then it began to squawk and the old birds flew around near by but soon went off. Then I took my captive home, put him in an old cage, and gave him some bread and water.

At first he would eat nothing, but when I gave him a few pieces of raw meat he ate them eagerly. Soon he would eat bread soaked in milk, but he never drank water, so I gave him milk instead. He would eat a few worms but he never cared as much for them as he did for raw meat.

We called him Lucky, because, I suppose, he was caught on the 13th of the month. Lucky was a very bright Crow, and when he wanted food he would begin to squawk, and keep on squawking until some one came to feed him.

At first we had to push food into his mouth but after a while he learned to feed himself.

During this time his parents had not forgotten him, for they came to see him every morning, that is they came as near as they dared to come, and kept up a loud cawing while they were near.

One day Lucky pushed open the door of his cage and after hopping around on the ground for a while he began to fly. In about half an hour he was sitting on the top of a tall chestnut tree, taking his first good look at the world. But his view was cut short, for a friend of mine climbed up and brought Lucky down.

After awhile we got tired of hearing Lucky squawk so I carried him over into the woods and let him go. But that afternoon a man who lived in the next house saw Lucky and climbed up into a pine tree and caught him. This man called him Joe and kept him in his barn for a time.

Joe, or Lucky Joe, as we now called him, grew very tame and would follow the man like a dog. When the man was hoeing in his garden Joe would sit on his master's shoulder and talk to him. But the minute he saw a worm he would jump down and get it.

The man taught Joe several tricks, one of which was as follows: Joe would be standing on the ground when his master would give him a small stick and then say, "Now Joe I am going to get that stick." Immediately Joe would dodge behind a tree and the man would chase him. Round and round they would go, sometimes Joe would run to the next tree and continue dodging around that, until at last he would get tired, and then he would fly off.

Another trick he taught him was this. He would say, "Joe, come up on my arm;" Joe would obey; then, "Joe, pick up that apple and bring it to me;" and Joe would always pick up the right apple and bring it to his master.

Still another was this. Joe's master would hold out a stick and Joe would jump up on it. Then the man would say, "Joe turn round," and Joe always would turn round.

This kind man kept Joe some time, but one day a large number of Crows had a meeting in the woods near Joe's house and when they left Joe was not to be found. Either the Crows killed him or else they made Joe go with them. But whichever it was Joe was never seen again.

T. B. PARKER, Mass.

I have in my possession a Green Heron, male, in the breeding plumage but instead of having green legs it has bright red legs. The Green Heron is quite a common bird in this locality, feeding along the creeks and breeding in the swamps. I have looked over quite a number of bird books to find out the cause of the red legs, but I can find no mention of any having been seen. Several Taxidermists have seen it and all say they have never seen one before like it.

ERNEST A. WATTS, Canandaigua, N. Y.

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CHAS. M. HIGHT, Franklin School.

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Vol. I.

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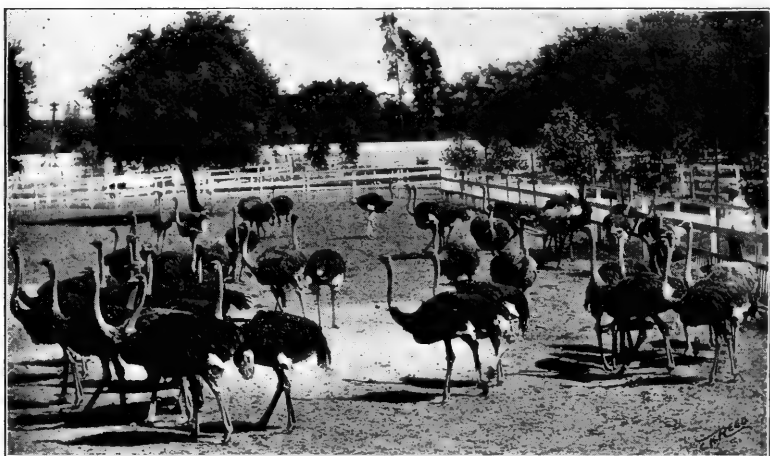
AMERICAN OSTRICH FARMS.

Nearly a thousand Ostriches, the descendents of African imports, are vegetating in California and Arizona at this writing. A pair of these creatures have been known in California to hatch thirty-seven chicks in one year; a brief reflection upon these figures without a lively imagination will in a very short time show large prospective profits in the culture of the American Ostrich; experience, the best teacher, shows that this rate cannot by any means be depended upon, but that different localities even in the same district affect very seriously the health of this strange specimen of the bird creation. Cold winds and the want of green food are often fatal to the Ostrich young; even the embryo is not free from



OUR CORRESPONDENT.

danger of destruction by the parent, either caused by fright on the part of the hen Ostrich, resulting in breaking the eggs while in the nest, or by the irregular appetite of the male, who will in some cases acquire a habit of eating the fresh laid eggs of his partner. The Ostrich industry has already attained proportions of sufficient size to interest capital; and today not a single Ostrich can be bought for love or money uncontrolled by the competitive demand of this Ostrich trust. For purposes of revenue most of the Ostrich farms of America are dependent upon the object of interest which these strange bipeds are to the tourists from the north; who annually visit the warmer climates of this country, in which only can the African Ostrich thrive. Exhibitions are made of the birds at Northern expositions, but these exhibits are by no means Ostrich farms in the true sense of that



OSTRICH FARM.

term, as seen in California, and but very few chicks are ever hatched at these temporary displays.

One of the most perfect and entertaining Ostrich farms of America lies on the border of a small town in Southern California called Pasadena. Here, at the head of the San Gabriel Valley and within five miles of Los Angeles, the metropolis of Southern California, is found an ideal procreating location for the Ostrich. Sheltered somewhat from the sea breezes, about three hundred feet above the level of the ocean, fed carefully on the best the market affords and regularly attended by the most skilled Ostrich farmer in the country, these collections of Ostriches, numbering altogether one hundred and twenty-five birds of all ages, are increasing rapidly; seldom is a death recorded and the proximity of the institution to the popular Los Angeles and Pasadena, so much visited by tourists, insures a constant flow of silver, through the gates of the Ostrich Farm.

The Ostrich is not hard to raise. One man can take care of and do justice to a hundred ostriches; the creatures feed on chopped beets, oranges and corn, though too much of the latter edible has a tendency to make the males fight. They are peaceable and even timid as a rule; during the breeding season the males becomes ferocious and stand ready to attack all intruders at all times, but the hens always run away when approached. All day long in the warm California sunshine the little chicks may be seen feeding upon the well kept lawns of the Ostrich farm; the flocks of adult birds hurriedly chase around the large corrals; from morning till night the mating Ostriches in the pens march up and down or sequester peacefully on the family nest, gazing with their large beautiful eyes upon the passing crowd. While the brain of an Ostrich weighs



YOUNG OSTRICH.

only an ounce and a half, it is possessed of a memory. If a man irritates a large male Ostrich in the breeding pens the creature will remember him; and upon his appearance weeks afterwards will advance to attack him. The keepers can go into the pens without danger, although it is noticed that they are constantly on the watch when they do so. One of the tallest of keepers at this farm has frequently held out at arm's length a belligerent Ostrich, the creature's legs flying out with marvelous force and rapidity but not quite reaching the body of the individual. With wings outstretched and mouth open the bird is truly a startling sight, but the denouement of his rage is after he has set down a minute and worked himself with open wings from side to side; this must be his challenge; he then rises and rushes at the object of attack with great speed, at the same time kicking to the front with his long muscular legs; a blow on such occasions has been known in Africa to result in death to the attacked whether man or horse.

One of the largest expositions of Ostrich feather manufacture in the world is contained in the large show room of this Ostrich farm; beautiful long Ostrich feathers of all shades and qualities, retaining their natural

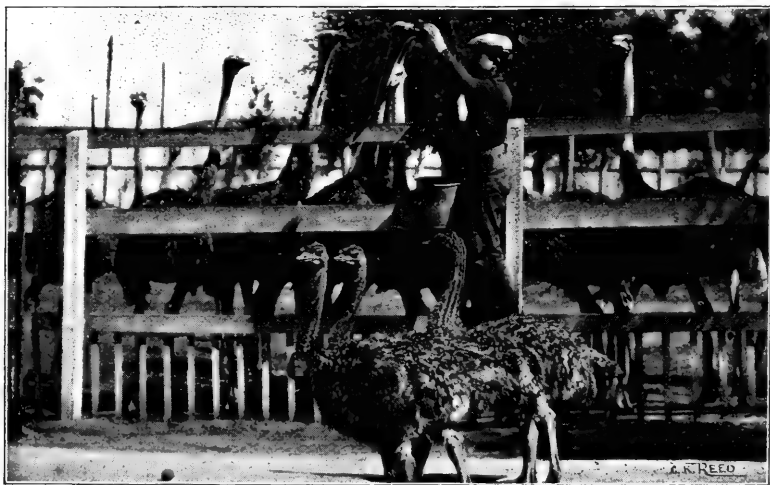


OSTRICH WITH WINGS RAISED.

ors; and indeed it is quite probable that a desire is born as soon as a woman enters this institution.

The prospect for this new industry is indeed promising. A very brief glance at the experience of the British ostrich farmers at the Cape of Good Hope will satisfy the most critical calculator that this business is a profit

curl, are displayed on every hand, forming an exhibition that particularly delights the heart of womankind. There also may be seen rows of stuffed little Ostriches, who have passed away, from catching cold, or have eaten something dry which has interfered with their digestions. Four salespeople are constantly employed attending to the wants of the visit-



FEEDING THE OSTRICH.

able investment; ostriches furnish an average annual revenue of some thirty dollars a year each for their feather product; added to this must be taken into account their natural increase; and added also, for the present at least, while the ostrich is a curiosity in America, the immense fund derived from exhibiting the farms as "sights." Three hundred thousand ostriches now yield their revenue to the English capitalists; and the time is not far distant, perhaps in this generation, when the ostriches of California, Arizona, Florida and Texas will cover the southern lands of the United States as they do the vast plains of Africa to-day. As regards the Afro-American ostrich it may be safely asserted that the experiments so far conducted with such enterprise and enthusiasm have resulted in unqualified success and achieved the task of domiciling this giant of the African desert, this fleet wanderer of the Soudan, among a civilized community for the good of all parties concerned.

ERNEST HORSEFALL RYDALL, Los Angeles, Cal.

Phoebe at Home.

I have been interested in a Phoebe bird who built her nest under a balcony of the boat house at Lake Quinsigamond, Worcester. After her nest was completed and she was sitting on her eggs it was found necessary to renew the rails and floor of the balcony. She remained on her nest all the time the men were at work, not seeming to be disturbed by them or by their pounding directly over her. She was seen on her nest after the men were gone, for a few days, but from six o'clock of the afternoon of May 18th she was not seen again for about a week. About that time a swallow either started to use her nest or to build under the eaves on that side of the house but the phoebe objected and spent two or three days fighting with the intruder, till at last she won and the swallow left. The phoebe went to work and built a new nest over the old one and the stale eggs and laid a fresh set of eggs and hatched them.

MISS JANE WOODWARD, Worcester

Dr. R. W. Shufeldt, author of "Chapters on the Natural History of the U. S." and for many years Associate Zoologist at the Smithsonian Institute, writes us of his removal from Washington, to New York City. His address now is 502 West 142 St., Hamilton Place, N. Y. City. We expect the Doctor will favor our readers at an early date with some interesting bird stories and illustrations.

CALIFORNIA VULTURE.*A. O. V. No. 324.**(Pseudogryphus californianus.)***RANGE.**

Coast range of mountains from the northern counties of California to northern Mexico. Their range is very restricted and they are found outside of these limits only as stragglers. They are usually found at altitudes of from three to five thousand feet from the sea level.

DESCRIPTION.

Length, 3.5 to 4 ft.; extent, 9 to 11 ft.; tail, about 1.5 ft. The general color is black. The feathers on the under side of the wings and in mature male birds, the points of the feathers of the shoulder, are white. Feathers on the breast are of a fine silky appearance, resembling hair. The head and neck are bare for the greater part, the feathers of the lower neck meeting the bare skin in a beautiful collar. The tail is black and each feather is nearly square across at the tip. The skin on the neck and feet of the male birds is yellow. On the females it is darker. The feet have no talons like an eagle, but resemble those of a domestic turkey. They weigh from twenty to thirty pounds, the males being about five pounds heavier than the females. The color of the eyes is a dark blue.

NEST AND EGGS.

The single egg of the Cal. Vulture is laid on the bare rock in small caves or holes in some of the most inaccessible cliffs within their range. This egg is laid during Feb. or March. It is a plain ashy green egg and might almost be called white. The surface is rather rough.



By permission of "THE CONDOR."
VULTURE NEST AND EGG.



CALIFORNIA VULTURE.



VULTURE EGG.

HABITS.

If measured by its extent of wing, this vulture is the largest bird in the United States. One that was secured in the Loma Pelon Mts. measured eleven feet and four in. in extent. This greatest of all feathered scavengers is strictly a mountain bird. If he descends to the valley, it is only to gorge on a dead carcass. After finishing his meal, with a few flaps of his enormous wings, he mounts into the air, and then without any further perceptible effort, and taking advantage of every favorable current of air, rises skywards until a sufficient altitude is reached, when he starts homewards. For a habitat he selects the roughest and most rugged mountains, and only those covered with coniferous forests and high cliffs. On these cliffs he sits sunning himself for hours. At night he will select the dead branches of some large pine for his perch and unless disturbed does not leave it before eight o'clock in the morning.

A large hole in a cliff, usually facing towards the south, is chosen for a nesting place. The bottom of this cave is covered with sand or broken bits of rock. A hollow is scratched out in this for the nest, sticks or any other material generally being omitted in the construction.

I am glad to be able to send you some photographs of the nest and eggs of the Condor. The photo of the egg is just as it was in the hole of the

rocks. The ledge below the hole was only eighteen inches wide so the camera had to be set right at the mouth of the hole, showing only one side.

Could the camera have been set a little farther back the entrance to the nest could have been shown. In the photograph of the cliff, the streak near the bottom is the narrow ledge and the hole with the nest is the one nearest the center of the picture. This photo was made from a rock standing about forty feet from the cliff containing the egg. The cliff faces the west or north-west and is several hundred feet high. The photo was made at 2 p. m. and was a very hazardous undertaking.

The large photo of the egg was made outside of the nest and is the same size as the egg. It is rarely that a nest is found where a photo can be made that will show the egg, and most photos of this kind are made by placing the egg in a hole in the rock that is accessible to the camera. It is not so in this case as the egg was found in the rock as shown.

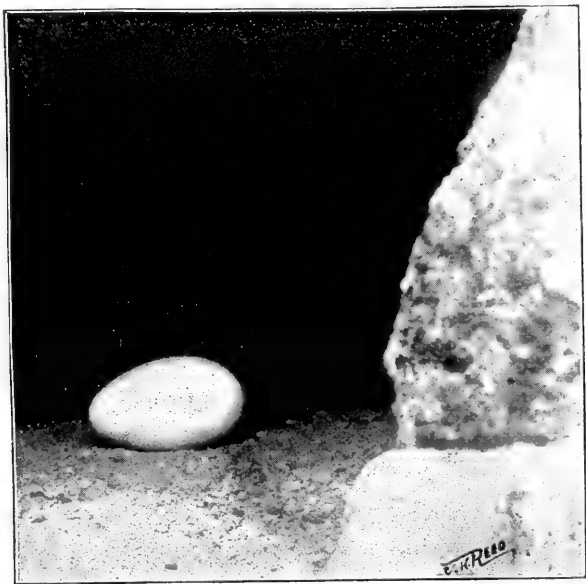


Photo by W. D. WOOD.

VULTURE'S EGG IN CAVE.

The eggs are laid in Feb. or March, and by May the young birds are well grown. One which was captured April 24, measured twenty-four in. from point to point of its wings. If they are not disturbed they will nest in the same place year after year. A young bird was taken from a

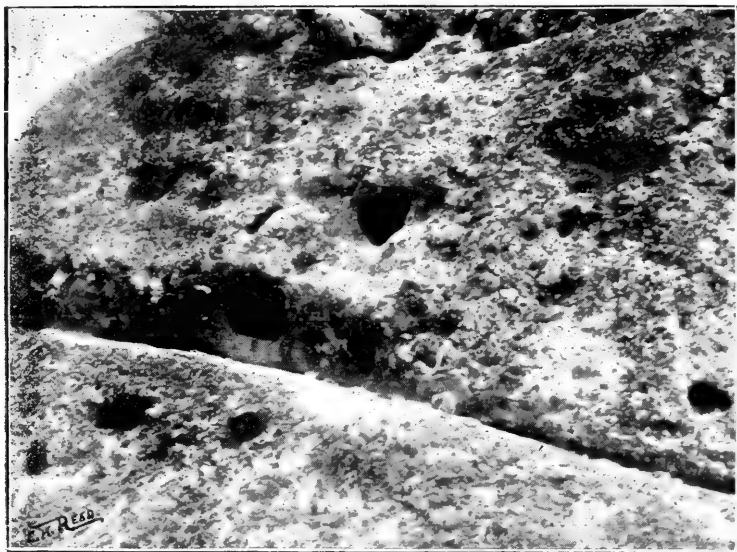


Photo by W. D. WOOD.

CLIFF SHOWING NESTING CAVE. (Hole above center.)

nest in 1890 and another in 1896, from the same nest, but they did not nest there between these dates.

The collector who tries to obtain these birds has a hard task as usually they are far back in the mountains and must be carried on pack horses for miles. Indeed, he is fortunate if, after having found one, it is not sitting on the brink of a precipice, where if shot it would fall to the bottom, many hundred feet below, and be picked up a worthless mass.

It is a fact greatly to be regretted that many hunters make a practice of shooting these birds whenever an opportunity occurs. They have no use for the bird, but kill it just because it is a rare one.

ARTHUR WILCOX, Arroyo Grande, Cal.

The "School Curiosity Box" that you sent us for the fifteen subscriptions to *AMERICAN ORNITHOLOGY* was received yesterday. The specimens are much nicer than we expected. The sea fans and some of the shells are just beautiful. My scholars are completely carried away with them. Some of the boys are getting up a new club to send in fifteen more names so as to have a duplicate collection. We thank you for your promptness in sending the premium, and wish your magazine great success.

MISS HELLEN MOSER, St. Marks School.

SHELTER FOR THE BIRDS.

With every recurring year come back the countless hordes of insects to prey upon our crops, and the repetition of more or less futile attempts to check or exterminate. But there is little use in trying to sweep the sea back with a broom, or to stay an avalanche with a straw. We must find an antagonistic cause, or make one, that when the time of development comes, it may do away with or neutralize the effect we fear.

But it is not in the power of man, with all his science, unassisted by the birds, to prevent the multiplication of insects from being the cause of his crops' annihilation. He may destroy trees and shrubbery about his borders which are supposed to harbor insects, clip his hedges, and grub out all the bits of wild growth in the neighborhood, and all the time be working to his own undoing. Money spent for insecticides is but a straw in front of the invading horde, and all the inventions and appliances and makeshifts never destroy one ten-thousandths of the host that encompasses and dismays him.

How much better it would be to accept the co-operation of the opposing army, which is both eager and able to do what we cannot, and which, moreover, is only waiting for our permission. Why not leave them a bit of woodland or wild shrubbery for nesting, in return for the protection of our crops?

All species of insects multiply in cultivated grounds, while the birds, with a few exceptions, that feed upon them, can find a nursery and protection only in the woods. Insects deposit their eggs in the soil, on the branches of trees, about fences and buildings, and are nowise dependent on a wild growth of wood and shrubbery. They need nothing better than the under edge of a clapboard or a shingle whereon to suspend their cocoons or lay their eggs, and so minute are the objects that will afford them all the conveniences they need, when hatching and when passing through all their transformations, till they become perfect insects, that no artifice or industry of man can deprive them of their nurseries, or appreciably lessen their numbers.

It is a significant fact that birds increase with the advance of civilization. The forest yields them but a scanty subsistence, and though its border is their nursery and shelter, their best feeding places are the cultivated grounds. There is not a single species whose means of subsistence are not increased by the clearing of the forest and the cultivation of the land, but they require a certain proportion of wild wood for their habitation. This is partly because of their naturally wild nature, and partly because we never attempt to win their confidence. While our grounds offer them a tempting feeding place, yet our very presence is always felt by them to be a menace. Very few species build their nests in the trees and shrub-

bery of our gardens, unless they are near a wood. In that case some birds nest in the garden, that during the rearing of their young they may be near the grounds that produce larvæ.

Most of the woodpeckers, the silvias, and the small thrushes, including some of our most valuable birds, cannot rear their young except in a wild wood. Yet all these, solitary as they are in their habits, increase under favorable conditions with the multiplication of insects consequent upon the culture of the soil.

That the presence of birds means a scarcity of insects, and the destroying of every acceptable harbor for them a corresponding increase of the agricultural pests, is borne out by incontestable facts. An orchard that is nearly surrounded by a wild wood of much extent is not often infested by borers and other injurious insects, and an apple tree growing in a little clearing or open space is invariably exempt from the ravages of the common apple borer. The same exemption is observed in those fruit trees that stand very near a wild wood, or any wood containing a spontaneous undergrowth. The explanation is that the wood affords a harbor to the birds that destroy these insects in all their forms. Orchards and gardens, on the contrary, which are located at any considerable distance from a wood, have not this security. It is true that robins are very abundant in orchards, which are their breeding places; but robins, though the most useful birds that are known to exist, take all their food from the ground. They destroy vast quantities of cutworms and chrysalids buried in the soil, but they take very little of their insect food from the trees. The birds that perform this work are the sylvias, woodpeckers, creepers, and other species that live only in woods and thickets.

The locust, which ravages the east with its voracious armies, is bred in vast open plains, which admit the full heat of the sun to hasten the hatching of the eggs, gather no moisture to destroy them, and harbor no bird to feed upon their larvæ. It is only since the felling of the forests of Asia Minor and Cyrene that the locust has become so fearfully destructive in those countries; and the grasshopper, which now threatens to be almost as great a pest to the agriculture of North American soils, breeds in seriously injurious numbers only where a wide extent of surface is bare of woods.

When the farmer destroys the border shrubbery in his fields and the thickets and woods on his hills, he exterminates the birds by hosts, while the mischievous boy with his gun destroys only a few individuals. There is no question that if their increase were not checked by the tree-destroying habits of model farmers, and the sporting habits of men and boys, birds of every species would increase in the same ratio with the multiplication of their insect food, and proportionally diminish their ravages.

FRANK H. SWEET, Waynesboro, Va.

SHORT-EARED OWL.*A. O. V. No. 367.**(Asio accipitrinus.)***RANGE.**

About equally distributed throughout North America, not being especially abundant in any part of its range. It breeds throughout Canada and the northern part of the U. S.

DESCRIPTION.

Length, about 15 in.; extent, 40 in.; tail, 6 in. Eye, bright yellow. Bill and toes dark gray. Entire upper parts variegated with brown and tawny yellow; the markings on the back and back of head taking the form of streaks, while the wings and tail are barred. The under parts are buff streaked with brown. The face is a dull white except for a black ring about each eye. The ear tufts are very small and hardly noticeable.

NEST AND EGGS.

NEST OF SHORT-EARED OWL.

These owls will nest in any marshy locality. Generally no nest is built, although sometimes a bird will be thrifty enough to wind a few grasses around the inside of the hollow in the ground and may go so far as to line it with a few feathers. In their breeding range in the U. S. they lay their eggs about the last week in April; in the more northern sections of the country they lay later. The eggs number from four to seven, and are white

and only slightly granulated.

HABITS.

This trim, intelligent looking owl has a much wider distribution than most birds can claim. He has brothers and sisters in practically every



SHORT-EARED OWL.



country on the globe. Wherever found, his habits appear to be the same and he shows preference for marshy regions, thereby earning his local name of "Marsh Owl." They are somewhat of a migratory nature and travel in small flocks.

On cloudy days you will sometimes see them skimming over the marsh; slowly flapping their long wings, they swiftly and noiselessly glide over the grass looking for trouble. The trouble in this case comes to the objects of their search, which are field mice and shrews. These small creatures are not given long to prepare for the next world, as their winged destroyer silently pounces upon them and hardly an instant elapses ere they are securely resting in his internal regions. Rarely does this gentle bird prey upon any of the smaller feathered bipeds, and if perchance you learn that one of them has been guilty of such transgression, do not at once rush for a gun with which to slay the offender; better to pay tribute to his skill and perseverance which have enabled him to rid the marshes of the obnoxious mice, and thus forced him to this diet.

Melanerpes Erythrocephalus (406).

U.S.

Passer Domesticus (E. S.)

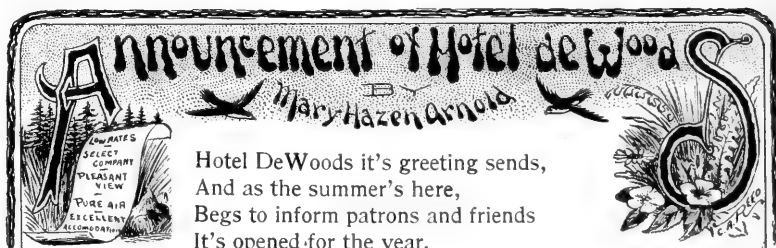
'Twas one bright May morning when I was on my way to my daily work, I noticed that considerable disturbance was taking place about half way up a maple tree. The tree had previously been cut near the top to make it spread. As is always the case, the branch stumps had decayed, and a pair of red-headed woodpeckers had decided to locate in one of the stumps. Making a suitable hollow, their home was completed.

The ever-present English sparrows, spying the opening in the stump evidently resolved to locate there also. Upon their examination of the premises the woodpeckers resented and manifested that the sparrows' presence was not desired. A few flutters and squeals and the sparrows were victorious. In a short time they began to have everything in readiness for an abode.

Three days later, upon passing the same place, the same noise was heard overhead, and I stopped to watch. Evidently the same woodpeckers had returned and resumed the battle, which was more furious than the previous one. Twenty minutes passed and still the battle raged, but in a few more moments, one sparrow dropped to the ground helpless, and the remainder gave way to the more formidable foe. The woodpeckers seemed to be joyous over their victory, although nearly exhausted.

The woodpeckers hold control of their home to this day and are now rearing a family of four, seemingly as happy as ever.

J. B., Illinois.



Hotel DeWoods it's greeting sends,
And as the summer's here,
Begs to inform patrons and friends
It's opened for the year.

The house is now filled with guests.
Some staid here through the year.
A few prefer their last year's nests
Which they find waiting here.

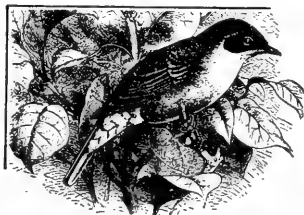
The warblers, too, make gay the place,
But transient guests are they.
Such beauty rare; such winged grace!
Would they could longer stay.

The rowdy sparrow too is found,
An ever present pest.
He haunts the place the year around;
He will not be suppressed.

Brown Thrasher, and the sweet Wood
Bunting of rarest blue, Thrush,]
The Maryland Yellowthroat, midst the
Chewinks and Robins, too. [brush,

Miss Jennie Wren, and Bluebirds dear,
Are found in many a nook.
All these and other guests are here,
Their names are on our book.

Our bill of fare fills every need.
'Twould suit an epicure.
Moths, worms, and bugs, and ripened seed,
And sparkling water pure.



On the owl train I think some came,
And some on fast express.
Sir Oriole, Bob White and dame,
Waxwings in Quaker dress.

The Grosbeak with a scarlet tie,
And dapper Catbird grey.
The Vireos on tree-top high,
The Chat and cross Bluejay.

Some gloomy rooms on the ground floor
Are left to Mrs. Snake.
Woodchucks, field-mice, and many more,
Will well repay your search.

A welcome is assured to all;
Dame Nature is in charge.
We hope that you, at least, will call,
Inspect our hotel large.



The rocks are crowned with lichens grey,
The banks with mosses green.
While verdure soft and blossoms gay
Deck sloping hills serene.

The music here is of the best.
At Vespers, Veery sings;
And when the sun dies in the West,
Wood Thrush, the curfew rings.

A summer school is held here too,
With long curriculum.
Science and Art, by methods new,
Are taught to those who come.

Freshly refurnished, is the place.
Brown rugs replaced with green.
Green draperies of sheerest lace
On every tree are seen.

Come fill your lungs with pure sweet air
'Twill drive away the blues.
Put far away each anxious care,
And every worry lose.

For those who spend the summer here.
We've something more than wealth.
Come to Dame Nature, never fear,
She proffers you—good health.



AMERICAN DIPPER.

A. O. V. No. 701.

(*Cinclus mexicanus*.)

RANGE.

The mountainous parts of western N. A. from Alaska to Central America, and from the Rocky Mts. to the Pacific coast. They are resident throughout their range.

DESCRIPTION.

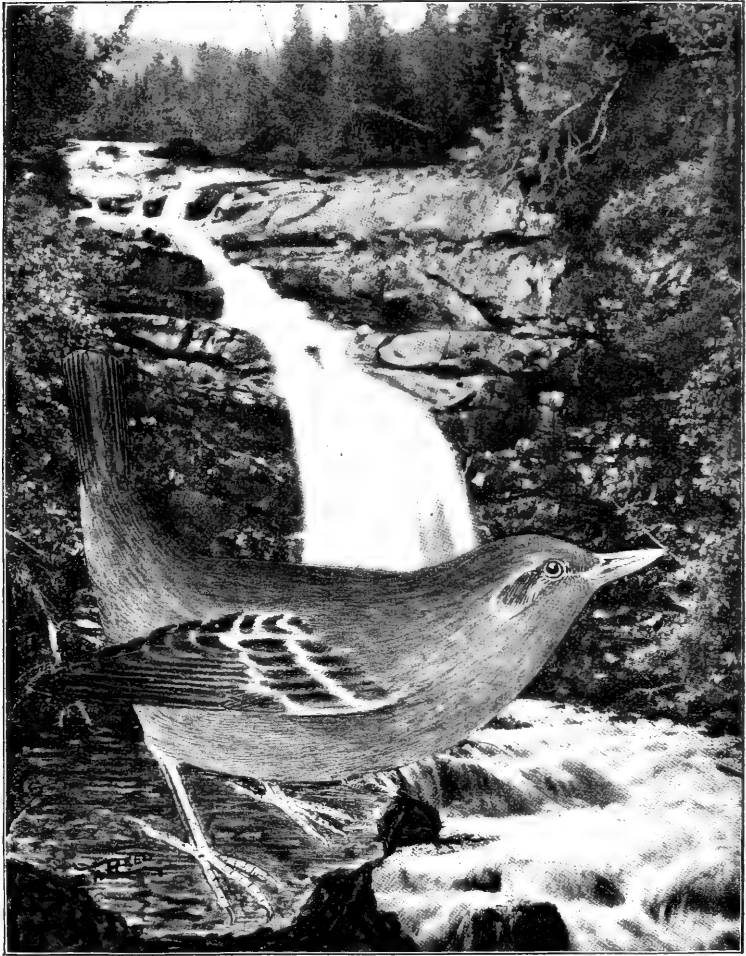
Length, 6.5 in.; extent, 10.5 in.; tail about 2 in. Eye, brown. Bill, black. Feet, yellow. Entire upper and under parts, dark gray, the under parts being paler than the upper. The young are white beneath and the bill is yellowish.

NEST AND EGGS.

These birds always build their nest near swiftly flowing streams or creeks. It is sometimes placed under an overhanging bank, on a rock in a crevice among the rocks, under the roots of a tree or possibly about the timbers of an old bridge. It is a large ball of green moss with an entrance at the side, the nest part proper being lined with grass. Their pure white eggs, three to five in number, are laid about the first part of June.

HABITS.

The American dipper, water ouzel, or water thrush, for it is closely allied to the thrushes, is a very unique, interesting and quite remarkable bird. Technically, it is named *Cinclus mexicanus*, for it was first described from the mountains of Mexico. It exists, however, along the entire Rocky Mountain range from Alaska to Mexico, and is peculiarly restricted to that region. It is the only member of its family in North America, though there is one species in South America, and another in Europe.



AMERICAN DIPPER.



It belongs, systematically, to the perching birds, or passers, having the true and characteristic perching foot, and judging from its appearance and structure, one would imagine that like all similar birds its habitat would be in leafy groves and bosky glens, or on the upland pastures. But this *rara avis* is, indeed, an anomaly in ornithology, for it was never known to alight on a tree, but prefers a rock or piece of drift-wood beside the babbling stream. And while it is quite swift on the wing, darting like an arrow up or down the stream, it never flies overland, but always follows the stream in its devious windings, where it is a familiar object to the observant angler.

It wades along in shallow water like a snipe or plover, though its legs are short. It swims on the surface like a duck, though it is not web-footed. It dives like a grebe or loon, and swims, or rather flies, under water for long distances, using its wings alone, its legs stretching out behind. It walks on the bottom of a stream or pond like a submarine diver in his armor.

It is of a uniform, ashy hue, or mouse color. Its bill is short, like all passerine birds, and its short tail is carried vertically. It is a very restless bird, nearly always in motion, and has a comical and characteristic habit of bobbing up and down, when standing on a rock, somewhat like the teeter-tail or tip-up sandpiper.

It feeds on insects and their larvæ, and other small organisms that find a home in the water. It emits a short, sharp note when startled, or on the wing, somewhat like the modified "scaipe" of the snipe.

I cannot but think that the cry and the genuflections just mentioned are in imitation of the snipe or plover, for the purpose of deceiving its prey. For as the waders can only go to the depth that their legs can carry them, in seeking their food, insects and worms in deeper water have no fear of them. But the ouzel, bobbing on the brink, while pretending to be a wading plover, and seeing its prey in deeper water, suddenly plunges in, or walking along the bottom of the stream secures the unsuspecting creatures—the victims of misplaced confidence.

The water ouzel, as one might suspect from its resemblance in structure to the thrushes, is the finest and sweetest singer among all the feathered songsters of the Rocky Mountain region. Its song is not unlike that of the canary, but far more sweet and tender. Standing on a rock beside a waterfall, its throat swelling with pride, it pours forth a sonata of exquisite tenderness and feeling, with liquid trills and joyous cadences, while the deep monotone of the waterfall hums a fitting accompaniment.

It builds its nest in a cleft of rock or other sheltered nook beside the stream, sometimes on the very edge of a waterfall, or even behind it. It is constructed of dried moss and leaves, and the opening is rather on the

side than on the top. It lays four or five white eggs, as I was informed by a lad who found a nest for me after much patient observation. I was exceedingly desirous to secure a nest and eggs, for I had never seen them. In my boyhood days of egg-collecting I would have secured and added them to my collection without compunction, but with the accumulation of years I have become more thoughtful and humane, I suppose, and I could not make up my mind to rob the mother ouzel of its home and future brood; and in order to resist the temptation I did not visit the spot until the eggs were hatched and the fledgelings flown.

These birds cannot be said to be abundant in this section (U. S. Fish Commission Station, Bozeman, Mont.), as I have never seen more than three or four pairs on the creek near Bridger Canyon. They remain with us during the entire year.

During my first spring and summer in our hatchery I was much interested in the ouzels. There was one pair that somehow found our ponds and were frequent visitors. They were very tame, sociable and companionable, as most anglers are aware. I watched them and studied them for an hour at a time. I saw them alight on the edges of the ponds, running along the brink like a pair of sandpipers, then suddenly walk into the water and along the bottom across to the other side, where they would emerge, and with their heads on one side look up at me quite knowingly, for I was, perhaps, not ten feet from them.

I have seen them plunge into the water, while flying, and continue their flight under the surface for the length of the pond. I have also seen them dive, like kingfishers, from the top of the drain boxes into the water. Then, again, I have observed them leave the shore and swim away on the surface like so many ducklings. As the water in the ponds, at such times, was very clear and still, the opportunities for these observations were very favorable, for every motion, even under water, could be distinctly seen.

It would be of the greatest interest to know how this aberrant species of the perching group adopted the habits of a water bird,—habits so at variance with the rest of the passerine tribe. It would also be of equal interest to imagine if in the future, after countless generations, the feet of the ouzels would become webbed, and their bills and legs longer and better adapted to their acquired habits, for acquired they must have been. On the whole, however, this does not seem to be really necessary in the economy of the ouzel, for it has certain physical advantages that the swimmers and waders do not possess, in addition to its imitative faculties.

That the ouzel is a very intelligent bird, and one that is always ready to take advantage of any circumstance or situation wherein its well being is concerned, cannot be denied, for I have already mentioned some of its habits wherein its ability for finesse and stratagem has been demonstrated.

But I will go further and say that its limitations have not been determined, and that it is equal to any emergency that may arise, in which it is especially interested, or in which it may hope for gain—and thereby hangs a tragic tale.

One day my foreman informed me that the ouzels were stealing our young trout which had been recently placed in the nursery ponds. I resented the imputation and said he must be mistaken, but he insisted that it was a lamentable fact that could be proven by watching them, and this I proceeded to do; and this is what I saw:

On the nursery ponds we have board floats as a shade and refuge for the young trout. While seated near the ponds I saw the ouzels alight on the edge of a float, stick their bills in the water and wiggle them. This attracted the baby trout, and as their curiosity took them near enough to investigate the matter they were remorselessly and greedily grabbed up and swallowed by my ouzels. Well, I was sorry, and told my foreman to shoot one, which he did. It died a martyr to an inquiring and inventive mind, or at least a victim to an instinct adapted to all sorts of expedients. On examining the contents of its stomach I found undoubted evidence of its guilt in quite a number of infantile trout.

But that was the last foray of the ouzels on my preserves, though one portion of the creek is but twenty yards from the ponds. They have not offended since—another evidence of the ready wit, if not reason, of this remarkable bird, the confiding companion of the trout fisher of the Rockies.

DR. JAMES A. HENSALL.

BROWN THRASHER.

A. O. U. No. 705.

(*Harporhynchus rufus*.)

RANGE.

The entire United States east of the Rocky Mts., with the exception of the northern part of Maine. It breeds throughout its range.

DESCRIPTION.

Length, 11 in.; extent, 13 in.; tail, about 6 in. Eye, yellow. Bill, dark brown, except the basal portion of the lower mandible, which is yellow. Feet, light brown. Entire upper parts uniform light reddish brown. The feathers of the wing coverts blackish towards the ends and then tipped with white, forming two narrow wing bars. Throat, white bordered on each side with small brown spots. Rest of under parts, duller white, the breast and sides being covered with lengthened spots of dark brown.



BROWN THRASHER.





BROWN THRASHER AND NEST.

NEST AND EGGS.

The nest is built at varying heights, from the ground up to six ft. It is located preferably in a dense scraggly thorn bush or thicket, surrounded by briars. It is rather compactly built, considering the material used, it being constructed of small sticks and twigs and lined with fine roots. By the latter part of May the set of four or five eggs will be completed; the ground color varies white or creamy to a very pale greenish blue, and they are thickly speckled over the entire surface with reddish brown.

HABITS.

There has always been a doubt in my mind as to there being anywhere a sweeter songster than this. With the exception of a few weeks in the summer he is the life of the bird neighborhood, as he leads their joyful chorus from morning till night.

Once a year in every bird's life comes a period of misery. This is during the summer molt, and the misery is probably caused more from the feelings of the mind than from any bodily discomfort. They are conscious that at this time they look rather shabby and they try to be as little conspicuous as possible. During the last week in August I traversed a section of country where, a week before the thrashers were pouring forth their melody on every hand. Not a sound was heard from them, and during my day's trip, I saw but one of these birds, and as he disappeared I noticed that a number of his tail feathers were several inches shorter than the others.



BROWN THRASHER.

Perchance a few of our readers have not yet made the acquaintance of this general favorite; a word to such. Led by unusual sounds you approach a certain tree carefully until you can see the source of them. On the top of the tree, or at the end of a branch, you see a brown bird, say perhaps, ten or twelve inches in length, the greater part of this being tail. He stands with head up and tail drooped straight down, and from his throat comes the most delightful warbling, whistling and trilling that it has been your pleasure to hear. You may safely put this down in your note book as the Brown Thrasher.

One of the first nests that I found this season was that of this bird. It was conveniently located on the south side of a thorn bush, and near the outside. As the Brown Thrasher is not a timid bird and will almost allow you to remove her from the nest with the hand, I anticipated no difficulty in obtaining some good photographs of her. Although I got the photos I had more difficulty than with any other that I have attempted.

About nine o'clock on a bright morning I called on her armed with all the utensils necessary for picture taking. After tying back a few of the branches to obtain a good view of the nest, I focussed the camera and retired to watch developments. After the first numerous angry expostulations against being driven from her home, she calmly perched on a branch about six or eight feet from her nest and waited to see what my next move would be. After waiting about four hours, watching her performing her toilet and apparently giving no thought to her home, I gave it up for that day.

After going through the same operation for several days, she concluded that since there was an easy mode of exit from the nest from the rear, that she would settle down to business and pay no attention to me, as long as I remained a safe distance away. Unfortunately the next day after this decision, some young hopeful chanced to discover the nest and appropriated the contents to adorn his cigar box collection of eggs; thus my expected series of pictures of this bird were broken soon after the start.

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Several of our subscribers have expressed the wish that we continue to announce in advance the birds that will appear in the two following numbers. This we will be glad to do, and we shall endeavor to keep to the schedule, although force of circumstances may cause us to substitute some other bird at times. We hope that you will send in your experiences or observations in regard to any of them. Remember that the copy for each month is made up by the 10th of the month preceding, so that it will be necessary to have your notes here before that time.

The October number will contain the following birds: Heath Hen, Chimney Swift, White-faced Glossy Ibis, Cal. Purple Finch, American Crow.

November will have: Black-bellied Tree Duck, Spotted Sandpiper, Broad-wing Hawk, American Bittern, Indigo Bunting.

How interesting it is to read an account of an afternoon spent with the birds. I have no doubt that every one of our subscribers has had experiences with the birds which would prove very interesting if they would just take a few moments to write about them. Just try it and see.

We appreciate the many good comments that we have received, both by letter and through the press. It is always encouraging to know that your work is appreciated. There is a small favor that we should like of each of our subscribers. There are thousands of persons throughout the country that are interested in nature and would be glad to subscribe to A. O. if they knew such a magazine was in existence. What we want is the names of some of these. Can you not send us a postal with the names of a few of your friends who you believe to be interested in our subject, so that we can send them a sample copy? Or if you will state how many samples you can use to advantage we will be glad to send them to you.

A BIT OF NATURE.

This spring a pair of White-breasted Nuthatches selected a hollow chestnut tree within reach of our piazza for a nest. I was very glad to have them there because they are insectivorous, and because they have an active, business-like air about them, which is very interesting. I was never tired of watching them.

When they decided to take the tree for a nesting place, they evidently thought that the piazza went with it, for they told me plainly that I wasn't wanted, whenever I tried to get acquainted with them. I succeeded at last, however, and in time they took no notice of me at all. They allowed me to hang a hammock within a yard of their nest, and in fact they seemed to take everything in good part except English sparrows. With the numerous other birds they lived harmoniously, but if a sparrow came near that precious nest, there was sure to be a fight, and that excitable little male was no mean pugilist either. Once or twice I went to his rescue with my gun and shot the invader, but the little fellow always regarded me and my gun as secondary matters. He seemed to think that he had killed the sparrow and could drive me away if I did anything which was not to his liking. He never tried to, though, but contented himself with driving sparrows, and the latter soon found that our grove was no place for them.

As soon as the sparrows were driven away, the birds began house-building and it is of this that I wish to tell. As the hollow in the tree was too large they began to fill it up with soft, gray lichens from the nearby tree-trunks. Both birds worked with a will, but there is no question but what the work would have progressed faster if the pair had been longer wed. They were too attentive to do much work at first, but when they did settle down to work in earnest, they set a good example for some of our workmen.

When the hollow in the tree was about half filled up there came a very long, cold rain, which, perhaps, my readers can remember. During this rain I forgot my new neighbors for a short time, and when I did think of them it was still raining. I wondered where the little creatures could find dry material for their house when so much rain had been falling. Here it was almost time for the eggs to be laid, and this pair of birds had not yet finished their nest. It seemed to me that the rain had spoiled all the material for at least a week. Surely this was a serious problem for these little birds, which some people claim are devoid of the power of reason.

But when I stepped out onto the piazza, to my surprise I saw that the birds were bringing load after load of dry lichens, just as though the sun had been shining for a week! I could not think where they could find dry lichens after such a rain, and at first the birds did not seem disposed to

show me, but after a little watching I saw that the material came from the leeward side of the largest tree-trunks, where there is always a dry strip. Who would have thought that these little birds, which some people claim cannot think, would have known where those dry lichens were to be found? Surely instinct, which most people claim governs wild creatures, does not lead in so small a detail. I believe that I never would have noticed this dry strip on the leeward side of trees, if these birds had not showed me.

WALTER E. BURNHAM, Mass.

SPRING COURTSHIP.

Although there is a vernal period of mating and love making, it does not follow that these striving birds take a new mate each year. I am fully satisfied that most birds are mated for life, at least this is more often the case than is generally supposed. I believe that the demonstrations of valor with which we are entertained are in nine cases out of ten simply a part of the annual love making. As a matter of course the male robin, or other bird will valiently defend his rights against all comers, and therefore when interference occurs battles are sure to follow. In the case of the Bluebird, the same demonstrations occur each season between well mated birds which have been consorting for years, that are seen between birds just mated. The valiant behavior of the birds of spring may be compared to the periodical tilting matches of the knights of old. It not infrequently happens that a male songster, after assurance of success in his suit, is supplanted by another of brighter color or sweeter song, or more likely, a stronger bird. However in all communities there are some individuals who have failed to secure a partner, and it is therefore an easy matter for the rejected bird to form new attachments, the only disadvantage being that nest building takes place a little later than the general run of nesters. It is pleasing to note that differences never arise after the pair begins building the nest. Occasionally one of the birds is killed after the nesting has fairly begun. When this happens to the female, the male gets a new mate at once and if the nest is still incomplete it is sometimes finished and the eggs laid. I have observed this act where the mother bird was killed, the hawks being much attached to a nesting site and returning to it year after year. Have also observed the act in the case of the robin. If the male is removed before the emerging of the young, the mother bird goes away, apparently out of the neighborhood. If there are young in the nest at the time the male is killed the mother generally brings the nestlings through successfully, but not always, if the young are small. I have always

observed in cases of this kind that the nestlings do not leave the home so soon, probably because development is impeded from lack of a full supply of food. With polygamous birds the loss of a mate is of less importance, but it would be interesting to learn what would happen to the cowbirds if nine out of ten of the males were destroyed.

MORRIS GIBBS, Mich.

Whip-poor-will.

When we were having our garden plowed this spring, the horses started up a whip-poor-will from a large flat stone near by. I ran to see what was there and found two large grayish eggs, spotted with dark brown and light. We thought the plowing might disturb the bird so much that it would leave its eggs, so had the garden made in another part of the field.

I have been to the rock every day, sometimes several times a day, and the bird became so accustomed to me that she took no notice of me in any way but seemed asleep on the "nest," if a bare rock without a straw or a stick can be called a nest. The eggs were moved about by the bird each day, yet were kept in the few grains of sand that had washed over the edge of the rock.

One day as I came past, the bird flew up and I saw that the eggs had hatched. There were the two young birds, covered with downy feathers, brown and gray, sitting so flat to the rock that at first I did not see them, but thought them a piece of gray moss. They looked so cunning that I took them up and cuddled them. After they were replaced they would hop after my hand as I drew it from them.

After a little I lay down in the grass and kept as quiet as possible to watch them. Soon both the old birds came with flies, which they fed to their baby-birds, and were off for more. The bird does not seem to brood her little ones as most mother birds do, but sits, apparently asleep, on the rock a few inches away from the sleeping little ones, looking, at first glance, as much like a large toad as like a bird, being speckled and spotted with very nearly the same colors.

The weather has been so hot that we have almost expected to find broiled whip-poor-will some days, but instinct has taught them to move with the sun, and so keep in the shade of the tall thick grass that surrounds their dwelling place. They are growing rapidly and I fear the little family we have watched with so much interest will soon leave us. We shall miss the bird that comes at evening to our open door or window and sings whip-poor-will, whip-poor-will in such a jolly way.

RANDOLPH LAWRENCE HAYDEN, Haddam, Conn.

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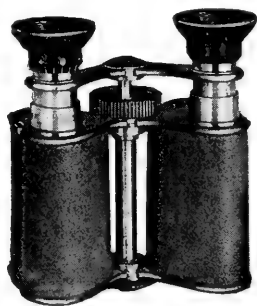
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Vol. I.

October, 1901.

No. 10

AMERICAN CROW.

A. O. V. No. 488.

(Corvus americanus.)

RANGE.

The United States and Canada, being more common in the east than in the west. It is practically resident where found.

DESCRIPTION.

Length, about 19 in.; extent, about 30 in.; tail, 8 in. Eye, very dark brown. Bill and feet, black. Entire upper and under parts, wings, and tail, glossy black. The rich metallic lustre is most pronounced on wings and back.

NEST AND EGGS.

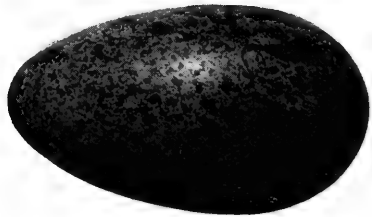
The crow builds a bulky nest of sticks. The nest is placed at most any height, on any kind of tree, but almost always they will attempt to conceal it in the topmost branches. Where pine trees are to be found they will choose the top of these for their home. The eggs may be found from early in May to the latter part of June. They are four or five in number and have a greenish or bluish ground, more or less thickly blotched with greenish brown. The illustrations show the variation in markings and shape.

HABITS.

Unprotected by law, with every farmer regarding him an enemy, and nearly every owner of a gun always on the watch to get within shooting distance of him, the crow still lives and is yearly increasing in numbers.



AMERICAN CROW.



I doubt if any other bird (with the exception of the English Sparrow), could exist under these persecutions. As to whether they are merited or not is a question still undecided. I think that the matter will stand much more investigation before it is decided that we would be better off without the crow.

It is with great interest that these black fellows watch the farmer at his task of preparing the soil for his crops. And it is not wholly with a view to regaling themselves on the seed that attracts them, for they know that later they will feast on the grubs and worms that attack the young grain. While they destroy considerable corn, they at all times prefer worms, grubs and any animal matter, and only consume the farmer's products when the food of their choice fails them.



Photo by J. B. PARDOE.

YOUNG CROWS IN NEST.

To determine the economic value of the crow the U. S. Dept. of Agriculture has examined the contents of the stomachs of many, and found that, during the summer and spring, their food consists of at least two-thirds animal matter; during the winter, grain, acorns and the seeds of numerous wild plants form their diet. During the summer they frequent the shore of rivers and the marshes searching for small fish, shell-fish, lizards, snakes, etc., and mice, beetles and spiders are not passed by.

The greatest fault of the crow and one that condemns him with many is his wanton destruction of the eggs and young of smaller birds. He knows that he is doing wrong and therefore is very quiet and cunning in his actions. He watches until the little owner of the nest is away, and

then slyly sneaks up and in an instant the destruction is complete. Although a large bird, he is very cowardly and will flee from any of the smaller birds if they detect him in the act.

Mr. Walter E. Burnham, Greenfield, Mass., writes:—"We hear a great deal about the destructiveness of the crow, and no doubt it is true to some extent. Even if it is I should be sorry to see all the crows exterminated. They are so bold and independent in their way, that one soon learns to like them (if he has no corn for them to pull up). To me the scene of an autumn cornfield lacks something if a few crows are not flapping over it; and a September sunrise is incomplete if a crow is not cawing, somewhere in the distance. Every fall I see enormous flocks flying southwards along the river, and numbers of them winter in the Deerfield meadows. I have seen them walking upon the ice within a few inches of the channel, caused by the rapidly flowing water, searching for any refuse that might be washed up. In the spring the crows that left in the fall return and spend a few days together sporting in the wind. On a mountain east of of my house used to be a large pine, and every morning in the spring and fall the crows held many meetings in this tree.

"They spread out over the country as the weather moderates and breed in May. When the female crow is setting, she frequently squawks like a setting hen, and I have found many nests, because of this. If she hears you coming, or the male warns her, she invariably slips quietly



Photo by J. B. PARDOE.

YOUNG GROWS (Just able to fly).

off the nest and flies away. If she does not happen to notice you as you approach, she will caw with all her might and attract all the crows in the neighborhood to her assistance.

"Early in the morning they come quite near the house and feed, and I have frequently seen them strip a piece of bark from a dead limb and eat the insects found there. The young birds in a flock at this time can be recognized by their rough plumage and cracked voices. As the season advances the young grow more wary, and soon acquire the beautiful glossy coat of their parents; their voices also develop into the strong ringing note of the old birds.

"Crows are very difficult to approach, and, I think, can tell when a man has a gun. While out walking with my father one Sunday an old crow started up from a field and lighting in a pine near by, kept scolding and cawing. I waved my arms, but still he showed no signs of fear; at last my father slowly raised his cane to his shoulder and pointed it at the bird, whereupon the crow dropped from the tree and flew away in great haste. Crows soon learn to distinguish their friends, and I have known them to come to a farmer's dooryard for food placed there for them. At Pualap Reservation, Wash., father has seen an Indian plowing in the field, and the crows walking about within a few yards of him, apparently without fear, but a white man could not get within ten rods of the same birds. They know that the Indians never shoot crows, believing that the spirits of their ancestors go into these birds. Crows are surely wise birds, and no doubt have a great many habits of which we know nothing."

CHIMNEY SWIFT.

A. O. V. No. 423.

(*Chaetura pelagica*.)

RANGE.

North America, east of the Plains, and as far north as Labrador. South in winter to Mexico.

DESCRIPTION.

Length, 5 in.; extent, about 13 in.; tail, 2 in. Eye, brown. Bill and feet black. Sooty brown above, being slightly glossy on the back. The under parts are much paler and nearly white on the throat. The wings and tail are black; the latter are slightly rounded and each feather ended in a spine.

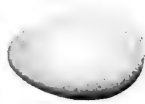
NEST AND EGGS.

Formerly the Chimney Swifts made their homes in hollow trees, but since the localities where they formerly bred have become thickly settled



Photo by TROY W. EARHART.

CHIMNEY SWIFT.



and their old homes cut off, they have adapted themselves to the new condition and now dwell in chimneys that are unused in the summer. A narrow platform is formed on the side of the chimney, by fastening numerous twigs together with their glutinous saliva. This is lined with a few grasses and four or five white eggs laid, during June and July.

In some places remote from human habitations, they still build their queer domiciles in hollow trees, and in many instances have been known to attach it to the eaves or rafters of a barn.

HABITS.

To observe or study most of our birds, it is necessary to leave the heart of the city and seek them in the suburbs. Not so with this long-winged, sharp-tailed, sombre colored bit of bird life. The occupant of an apartment in the city can sit at the window and observe these birds as readily as the one who resides in the country.

Just before dusk, large flocks of swifts wheel back and forth over the city, each individual keeping up a continual chattering twitter, as he darts about catching small insects for his evening meal. As darkness comes, one by one they disappear down neighboring chimneys, and the silence of the night is unbroken, that is, outside. Within the chimney it is not always silent. The swift is a restless sleeper, and in changing his position frequently disturbs another which has just fallen into a sound slumber; this one in order to show his displeasure, repeatedly jumps backwards and striking his wings against the opposite side of the chimney, springs to his former position again. When a number of them get aroused in this manner, the effect on the occupant of a room adjacent to the chimney is anything but soothing. I have slept in a room where the chimney was occupied by but two pairs of swifts, and from the experience gained thereby wish to be excused from occupying a house similar to the one described in the following notes submitted by Mrs. J. E. Chapman, Richmond, Me:

"The Swifts arrive here some time in May, I cannot give the exact time, but they do not all come at one time. Comparatively few come for perhaps two weeks, and then they come in such numbers that it would seem impossible for them to pack themselves in the chimney. They fly mostly in the evening. At about seven, they begin circling around at some distance from the chimney. They will act as if they were going in but then dart off and fly around for perhaps an hour, when one or two will go down the chimney and in a short time they all follow. One person says he counted fifteen hundred go in, in one night, but I do not see how it would be possible to count them as the air is full of them."

"One summer we were having some repairs made in our house and they seemed angry about it, and left and went across the street and lodged on

the branch of a tree, packed one on the other, making a solid mass of birds as large around as the trunk of a large tree, but the next year they returned again. Some years there are less than others; this year there have been great numbers of them. They have been leaving now for two or three weeks (Aug. 25) and few are left."

"They do not fly much in the morning, only coming out and circling about to get their breakfast and then go away for the day if it promises to be fair. If I want to know what the weather is to be, I watch the swallows. They have never failed me. If they go away from home, it is going to be fair, and if they return in the morning, it will not be pleasant. They have never built a nest in the chimney they live in, but once they took possession of another one and I heard young birds near the bottom of the chimney in the cellar. They are always noisy in the night, but this summer have been more so than commonly. It sounds like the roaring of a great fire. They came out into one of the rooms one summer and I caught one to examine and see how they cling to the sides of the chimney. The tail feathers have a sharp spine at the end, and I suppose that these with the aid of their wings and sharp claws enable them to maintain their seemingly uncomfortable position, but I cannot see how so many of them get inside the chimney unless they crowd themselves one on the other."

WEDDED FOR LIFE.

Just beneath the diamond shaped opening in the hay loft of my father's carriage house was placed the rustic summer home of a pair of swifts. I remember my father telling me that this nest had been there to his knowledge for fourteen years; and well I recall when a boy of ten climbing to the nest to look at the five white eggs. I used often to catch the birds as they clung to the side of the loft, and show my playmates the spikes in their tails. This was during the season of '80. The following Spring, acting on the advice of my father, I made two bracelets of coiled hair wire, and catching the birds, fastened one about the leg of each. For the following five years the same pair of swifts occupied the nest.

About this time business took me to New York, and I have only occasionally visited the old haunts. The summer of '90 I climbed into the old loft, and found to all appearances the same old nest, and upon catching the old birds, found that one still had the copper wire upon it's leg. Whether the other bird was a new mate or had lost the wire, I cannot state. Two interesting facts were however demonstrated, first that the swift at least remains mated for life, and second that they are a long lived bird. I cannot of course state whether this pair were the same ones first observed by my father fourteen years before my observations commenced, but "my birds" nested "on the old camp ground" from '80 to '90, a period of ten years, and the nest to my knowledge has been there over thirty years.

HOWARD L. WOOD, M. D., Groton, Ct.

ONE SUMMER WITH A FAIRY HOUSEKEEPER.

Amid the noble trees and green hills of a beautiful country village not a thousand miles from Cromwell, Conn., stands one of the charming homes which dot the New England hills. In the orchard at one side may be seen the homes of many of the feathered tribe, the chattering wren, king birds, pewees, the swaying hammock of the oriole, the mud hut of the robin and phoebe, while from the green fields across the way comes the plaintive song of the meadow lark, and Bob-o-Linkum's jubilant, tinkling notes.

In the hollow trunk of one of the rows of maples which affords a leafy screen by the roadside, a pair of flickers have made their home, and during the warm summer days the mother bird might be seen sitting at her circular doorway, with head and neck extended, and bill open as if panting for breath. But interesting as the examination of these homes might be, it is not of them I wish to tell you, but of another little family which held many formal receptions, and were greatly admired.

In the early part of June a very tiny couple darted in and out among the flowers and trees looking for the best place to begin housekeeping. They finally selected the branch of a tall larch tree by the veranda about ten feet from the ground as a home site, much to the delight of their friends, who from behind the blinds but a few feet distant had the rare opportunity of looking out directly upon the nest, and observing every detail of their domestic affairs.

The second week in June, Mrs. Hummingbird began her labors; adjacent hill sides and valleys were searched for the softest fern wool and plant down for lining a dainty cradle. Not until the interior was fitted up and upholstered to her taste did Madame Hummer turn her attention to the decoration of the outside walls. She would dart away, to return in a short time; apparently bearing upon the feathers of her breast some sticky substance with which to attach the mossy covering to the exterior walls of her domicile. She would scrape her breast feathers with her slender bill, and apply it to the outside of the nest, passing her bill round and round the structure with lightning rapidity, and with machine like regularity. Then away she would fly for bits of gray lichen which she quickly put in place. Many of the gray shingles she obtained from the bark of a magnolia tree close at hand. At last the dainty home was completed, blending perfectly with the supporting branch of the larch, and no objections could be made by the most fastidious hummer couple.

Then Mr. Humming Bird, who had hovered about and given his august approval while Madame did the work, disappeared, and was seen but once again about the habitation. The petit bride devoted herself to

housekeeping cares, and soon the soft walls encircled two diminutive white eggs, no larger than a field bean. For two weeks the patient mother sheltered them with her soft feathers, entirely oblivious of the loving scrutiny of her interested admirers behind the blinds. Nor was she frightened from her post of duty by invaders beneath the tree, but would slowly move her head to and fro with the regular swing of a pendulum till the intruder disappeared.



Daily she fluffed up the downy bed with her feet, and daily she glued fresh bits of lichen on the outside of her dwelling, after sallying forth as before for the mysterious adhesive matter. She invariably alighted upon the nest, not upon the side walls. Whenever she left the nest she would apparently pull up the lining around the eggs to keep them warm, and even after the coming of the little ones would pull up the soft wool blanket about them.

The first day of July the baby birds emerged from their white prison houses, "featherless bipeds," with short yellow bills, looking much like little grey grubs, no larger than the nail of my little finger. It seemed that not even a mother's love and faith could see promise of the wondrous possibilities they contained. The babies grew and grew, but not until two and a

half weeks had elapsed were they able to raise their tiny heads above the edge of the nest and peer into the wonderful world outside.

One morning when our wee friends were about two weeks old, grandpa, desirous of a close acquaintance, decided to make them a friendly call. In spite of his three score and sixteen years, he bravely mounted chair, box, and plank, and presented his compliments to the occupants of the nest, but what they said to him, or what he said to them, they have never divulged. July twenty-second when these infants were just three weeks

old, they decided to leave home and try their fortunes in the wide, wide world. They perched awhile on the edge of the nest, then, late in the afternoon one flew up and lighted on one of the small feathery branches of the larch just above him. Here he remained for nearly half an hour; apparently very much frightened to find that the world was so large, especially when his resting place was swayed by a passing breeze. Then back he flew to his home; settled down in a satisfied way, and doubtless told in bird language marvelous tales of his adventures to his brother who had not yet plucked up courage to venture forth. At nightfall when the nest was visited, but one little bird was found. Startled by the investigation, he bravely flew out to a dead branch on a magnolia tree, he was not going to be left behind all alone, not he. Here he clung in terror until dark, when his mother coaxed him away to a safer place. The next afternoon he was seen in an apple tree not far away, where the mother fed him in her own peculiar way, pumping the partly digested food into his throat. The next night the little wanderers camped out in a maple next the larch. Until the coming of cooler nights which warned them to begin their long journey to the South country, the little family sported about their summer home. When it became certain that the little house in the larch would be occupied no more by its owners the branch which held it was cut off, and treasured as a beautiful memento of the charming little hummer friends who had beguiled away so happily the summer hours.

MARY HAZEN ARNOLD, Waterbury, Conn.

HEATH HEN (Hethen).

A. O. U. No. 306.

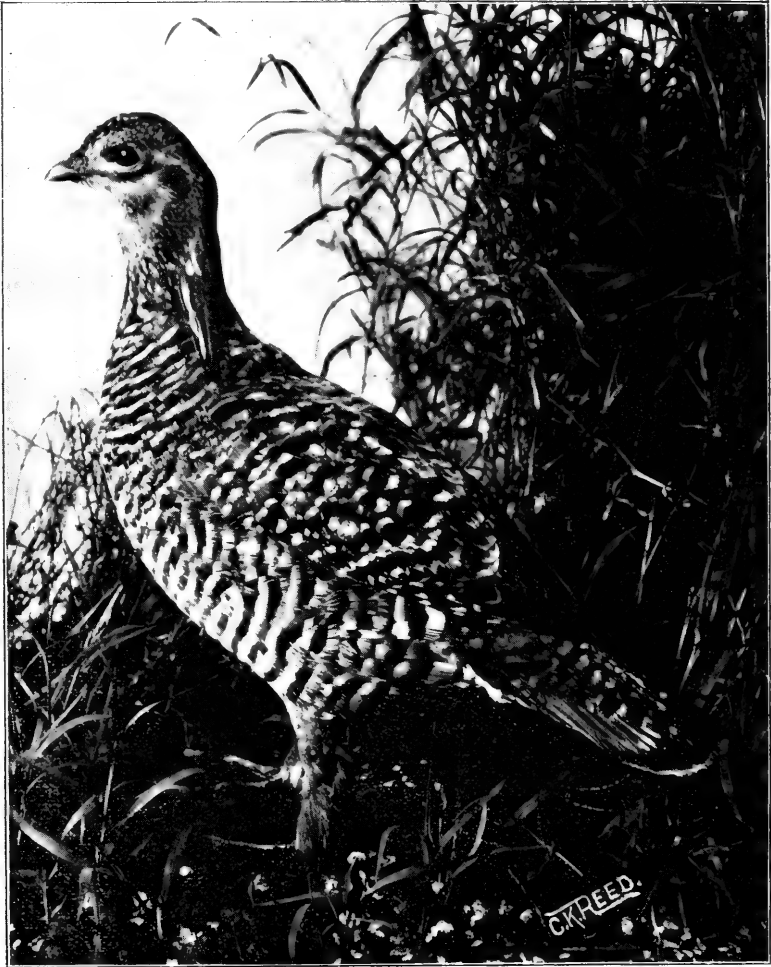
(*Tympanuchus cupido*.)

RANGE.

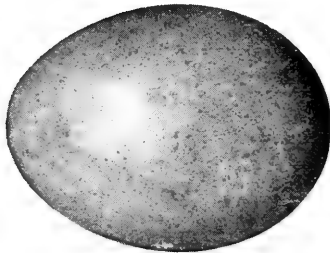
Island of Martha's Vineyard, Massachusetts.

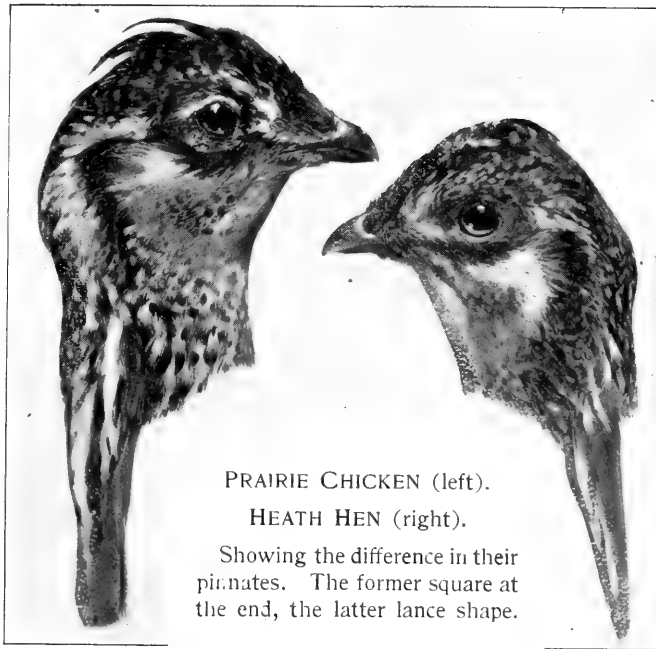
DESCRIPTION.

Length, 16 to 18 in.; extent, 27 to 29 in.; tail 4 to 5 in. Bill, horn brown; feet yellow; eye, hazel. Male and female, above, variegated with brown and tawny. Below barred regularly with dark brown, but in some cases almost pure white on the abdomen. The chief differences between this bird and the Western prairie chicken are as follows:—The pinnated feathers of the male are much smaller, quite sharply pointed and fewer in number. The general color is much darker and browner. The markings under the wings are much stronger. The tarsus somewhat shorter. The bird averages smaller than the Western bird and does not bring so much into the market on that account. Marketmen who have handled this bird tell me it is not so desirable for that reason.



HEATH HEN.





NEST AND EGGS.

Very little is known of the breeding habits of this bird. Mr. C. J. Maynard procured a set of six eggs on July 24, 1885. In 1889 a nest was found near West Tisbury, by a school girl, containing seven eggs. This was found the latter part of June in the scrub on the ground. A female was captured alive in middle of June, 1892. This bird laid one egg while in captivity, which was unfortunately destroyed by rats. Only one other egg is known to the writer. It was taken from the oviduct of a female in the Autumn of 1896. The dimensions of the Maynard set were:—length, one and thirteen-sixteenths to one and two-thirds inches. The greatest width of all five eggs of this set was one and one-fourth inches. The length of the egg taken from the oviduct was one and one-half inches; width one and one-eighth inches. The color of the eggs taken by Mr. Maynard were creamy buff with a greenish tint and unspotted. The color of the single egg given above was much lighter, which can be accounted for from the fact that the color had not been deposited on the egg.

Thus closed the history of one more interesting member of our New England fauna, which, with the wild turkey has disappeared from the Eastern states forever, and can only be represented in the future by its introduced Western relatives.

HABITS.

The writer of this article has had more opportunities for observing this bird than perhaps any other observer. The period covered is more than twenty years, and the number of specimens seen during that time would probably reach into the hundreds.

After a careful study of my notes, along with all the information I could gain from the hunters who were intimately acquainted with the bird, I have come to the conclusion that it differs but very little in its habits from its Western relative, and the differences that there are, are caused by its restricted environments. Its range covers all the barren portion of the Island and it prefers the more open portions to the wooded ones, and seldom takes to the woods unless driven there by inclement weather, lack of food, or enemies.

Its food in the summer time consists very largely of grasshoppers, crickets, spiders and other insects. I have found few berries in the crops of such as I have had the opportunity of examining, and my opportunities have enabled me to make examinations at all seasons of the year. Later in the season these are interspersed with wild cranberries and cranberry leaves, of which they are very fond. And these, with the addition of sorrel and clover, constitute practically all their food during the later Autumn and Winter, *except at such times as through heavy snow falls or extremely stormy weather, they are driven to the more sheltered portions of the woods to find food*, then they eat acorns. But I am satisfied they only eat them when they cannot find other food. They roost on the plains in small scrub oaks.

Mr. Chas. E. Bendire, in his history on North American birds, states the hethen is almost exclusively a woods bird, seldom coming into the open except in early morning and evening. My experience has been that at all times of the day, for every bird that I have seen in the woods there were at least twenty-five out in the open. This bird used to be very common on the Island. Old hunters have told me that they have seen as many as two or three hundred birds in a flock. They have gradually dwindled in numbers through being hunted very closely by native hunters, many of the birds finding their way to the Boston and other markets, but a great many more being used at home.

I saw a bed tick filled with the feathers from this bird. In 1892-3 men who had watched this bird closely on the Island, stated to me that they had diminished in numbers in the previous five years to about one-quarter what they were previously. In June, 1894, a fire swept over practically all their breeding grounds, and in the Fall of that year I spent two weeks going over their whole ground. We found many skeletons of the birds that had been destroyed in this fire, and where the previous Fall we start-

ed up one hundred birds, we did not start up five. Added to these two causes for its diminuation in numbers, must be added a third, i. e., the destruction done by foxes. A number of years ago there were no foxes on the Island, but some one thought it would be a good thing to have fox hunts and introduced them. This bird being an easy prey for the fox, a great many were undoubtedly destroyed by this animal.

Since 1894 these birds have been very few in number compared with the years previous, and in 1897 they had practically been exterminated or died out. The Fall of that year, I went over the ground again and in one week's time, with good dogs to locate any birds there might be, I did not start a single bird.



HEATH HENS.

In the Spring of 1898 two mated pairs of western prairie chickens that had been on exhibition in the Boston Sportsmen's Show, were liberated by one of the local sportsmen on the Island. This I am positive of, because I am well acquainted with the man who liberated the birds, and others who saw them. These birds have undoubtedly bred, for in the Fall of that year two broods of young birds were located in the region where the prairie chickens were liberated. The old birds were also seen at various times through the summer in the same locality. Since that time they seem to be gradually gaining in numbers, though they are very few but it is undoubtedly owing to the introduction of these Western birds and their interbreeding with the few that were left.

CHAS. E. HOYLE, W. Millbury, Mass.

MISCHIEVOUS JIM.

He was brought to me one beautiful spring morning, soon after he had taken his first lessons in flying, and just old enough to be taught how to rob the farmer's newly planted corn field. It was in this act that he was captured. When he was comfortably perched upon my finger, his eyes twinkled saucily at me from his glossy black head, and his bill opened every now and then for something to eat.

I tied the end of a string to one of his legs and fastened the other to the back of a chair, leaving it just long enough for him to fly from his perch to the ground, and placed it outside the kitchen window where he could watch me at my work. As long as I remained where he could see me he was quiet enough, but if I went away he would beat his wings against the window screen and make a mournful noise until I appeared again, then he would chatter constantly, sometimes as though scolding, then in a happy contented tone when I talked to him. If I scolded him he tucked his head under his wing, and when I stopped he would take it out again, while his merry eyes danced mischievously and his saucy chatter would begin again.

When he was hungry he made a mournful noise as though he was hurt, keeping time with the opening and shutting of his beak. He was very fond of fish worms and if he saw me digging them he would not taste his other food, which consisted of cracked corn, seeds, and bread and milk, but would wait for me to feed him the worms, one at a time, into his wide open mouth. When he wanted water he would quickly cry "ca-caw" and close his eyes soberly.

Oftentimes when the fowls were being fed, the first I would know of his presence would be when I heard the rustle and whirr of his wings as he would come swooping down from the towering oak tree tops, and he would flap his wings excitedly when the fowls scattered in all directions, for he was the daily terror of their lives. At these times his tantalizing spirit showed itself, and he would monopolize the hen yard and would not leave it until he was driven away. Then he would hop onto a poor unsuspecting hen's back, holding on so tightly that do what she would, she could not shake him off.

As he grew older the thieving instinct grew with him, and his most bitter enemies were caused by this habit. They were a pair of industrious kingbirds, who had built their nest in an old apple tree close to the house. After the eggs were laid the mother bird used to fly off some distance away. When Jim, as I called my pet, saw her leave the nest, he would fly stealthily up to it, light on the edge, seize an egg in his beak, and fly as fast as he could towards the house. After a while one or the other of the birds stayed around all the time, so Jim used to have a hard time get-

ting at the eggs then. However he would approach the nest very bravely until the birds spied him, then he would fly to the house the shortest way possible. One morning on looking out of the window I saw the poor fellow trying to get to the house, with a kingbird picking feathers from his back and another attacking him from the front. Above the loud whirring of their wings rose the angry voices of the owners of the nest, mingled with the most heartrending cries of the crow. Moved by his sorry plight, I opened the door so that he could fly in. When he saw it he instantly darted toward it, closely followed by the angry birds, who came in through the open door before they realized that he had escaped. A happier crow never lived, when he saw his assailants leave. As it was, Jim was a sad looking bird. His once smooth glossy feathers are now sticking up in all sorts of ways, and many lay scattered about. The poor crow was trembling all over while his black eyes glistened excitedly. It was some time before he got over his fright and ventured to go out.

Not only did he break up birds nests, but he stole everything that he could carry away. One day after he had been in my room I saw him hop stealthily through the open door, then fly quickly up to the roof of the house with my scissors in his beak. I shouted to him to bring them back, but he only twisted his head around and blinked at me. After awhile I persuaded him to drop them over the eaves; as I stooped to pick them up down came thimble, thread and numerous other small articles which I had missed for a long time, and overhead Jim was scolding in an undertone. I never missed anything after that, for he didn't like the idea of being found guilty.



He was exceedingly vain. After standing by the hour in front of a mirror he would strut haughtily by, and not deign to look at any of us if we spoke to him. One day after he had primped up and tired of the mirror he flew out of doors. Just outside was a tub of clear water. As Jim flew by he caught a glimpse of himself. The temptation was too great; he perched on the edge of the tub and began to chatter. Whether he lost his balance or whether he thought there was another crow in the tub I cannot say, but there was a squawk and a splash and he went to the bottom. Not to stay, however, for in less time than it takes to tell it, he was out of the tub and in the house drying himself. All his fine looks were gone, and nothing but a plastered lot of feathers wrapped about the shivering body of a sadder but wiser crow, was left.

Nothing seemed to please Jim more than to get in everyone's way when we were about the daily housework, and ironing day was his delight. If possible he would get in the clothes basket and jump up and down on the clean clothes with his dirty feet, and when driven off, run under the table cackling with great glee. But his

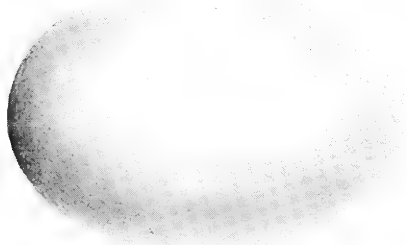


gravest fault was his inquisitiveness. No human being possessed a larger bump of curiosity than he, and it often caused him great inconvenience. Alas it was the death of him. It happened on a beautiful day in October; one of those days when our hearts are filled with joy, and everything seems to go along just right. Well, Jim had spent the day in mischief generally; parading around on the backs of the terror stricken hens; driving the chickens from their meals; calling for something when he didn't want it; startling some unsuspecting member of the family by suddenly alighting upon their head and shoulders, and then flying away cawing mockingly. He was snapped at by Nero, when poking his beak into his ear; rescued in time from pussy when his curiosity led him to molest her kittens; he was scolded by his master when he picked his shaving pad to pieces, and by his mistress when he picked currants from her cake. At last he was put out of doors. Still he couldn't rest easy. Our hired man (a more tender hearted man never lived than he), was cutting up some small twigs for kindlings. Jim would not let him alone, but kept lighting on his head and bothered him in all ways possible. He also thought it was his duty to assist in putting twigs up on the chopping block. Alas, at one trip he missed his calculations, and before the fatal weapon could be stopped it had done its terrible deed, and poor Jim never moved again.





WHITE-FACED GLOSSY IBIS.



WHITE-FACED GLOSSY IBIS.**A. O. U. No. 187.***(Plegadis guarauna.)***RANGE.**

Chiefly southwestern United States. Found occasionally in Oregon, British Columbia, and on the eastern Gulf States. Southwards into South America.

DESCRIPTION.

Length, 24 in.; extent, 38 in.; tail, 4 in. Eye, red. Bill, brownish, changing to reddish towards the tip. Feet and legs dark red. Sides of the head bare between the eyes and bill. Entire under and upper parts a rich glossy purple, the back and wings being very iridescent with blue, green, purple and gold reflections.

NEST AND EGGS.

These birds nest by thousands in company with other herons, along lagoons in the southern parts of Texas. They build their nest of dead reeds woven and wound about the living ones, forming a deep structure wholly unlike the slip shod affairs of the herons. The eggs are laid early in May and are three or four in number and of a deep greenish blue color.

HABITS.

This is the most common of the Ibises in America, and like all others of the family they are graceful in action and always present a well groomed appearance. On the wing it is not only strong, but swift and graceful. Its wings are extended to the full length and moved in regular succession. Sometimes they will sail along for some distance or soar in half circles. They generally fly quite high and when a large flock alights and also when they take wing the utmost confusion reigns.

They feed on small fish, mollusks, insects, beetles and various water plants. In search of these they frequently wade quite deep and do not object to occasionally swimming. Although great numbers of the Ibises are shot every year, just for "sport," and thousands of their eggs are taken, still their numbers are so great that probably the protecting arm of the law will extend to their localities in time to preserve them from total destruction.

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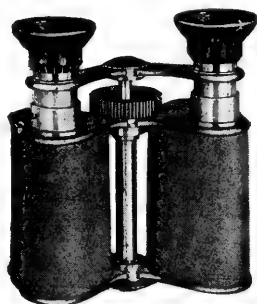
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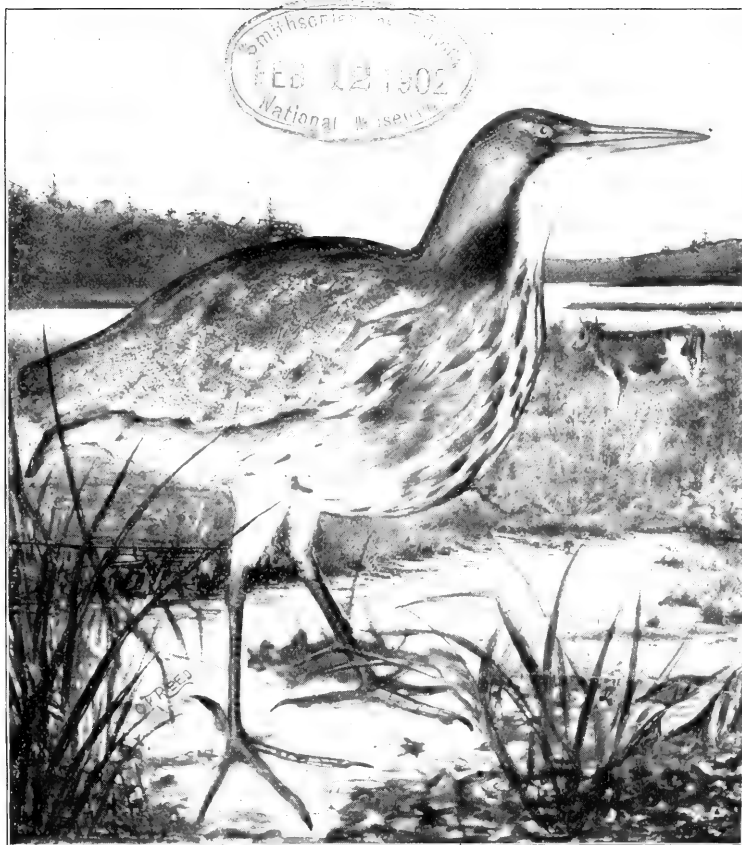
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Vol. I.

November, 1901.

No. 11

YOUNG OSTRICHES.

California Ostrich Farm (See Sept. No.).

The most interesting thing about the juvenile ostriches is the rapidity of their growth; they emerge from their ostrich shells the size of full grown ducks and begin to eat the green alfalfa. This alone must be their diet for several months, for dry food has been found to be very injurious to young ostriches. In Africa many thousand of the ostrich young perish from a disease termed "yellow-liver," but this pest has not so far affected the American ostriches. Given plenty of grass and water they increase in height at the marvelous rate of twelve inches a month, so that in six months they are nearly as tall as their parents, but by no means so muscular. While very young they are nightly housed in what are called brooders, consisting of long boxes about 30 inches wide and high and eight feet long; in the morning after sunrise they are turned out upon the alfalfa and remain until sundown. Thus cared for and protected the mortality among the ostrich young in California has not exceeded ten per cent; in Arizona they have not so far made as good a showing. Each ostrich chick the moment it is hatched is worth twenty-five dollars; time only increases this value, so that at two years of age a pair would cost \$250, but who shall figure on the exact value of a prolific pair of adult ostriches hatching thirty-five chicks in one year, each chick being worth \$25?

E. H. RYDALL, Los Angeles, Cal.

BROAD-WINGED HAWK.**A. O. U. No. 343.***(Buteo latissimus.)***RANGE.**

North America east of the Great Plains, and from southern Canada to the Gulf and in winter to Central America. Breeds throughout its U. S. range.

DESCRIPTION.

Length, 14 in.; extent, 33 in.; tail, 7 in. Bill, horn color. Eye, brown. Feet yellow. Adult:—Above, dark brown, the feathers having lighter edges and the shafts black. Primaries and secondaries black on the outer webs and white barred with brown on the inner. Tail crossed by three black bars, separated by narrower ones of gray. Entire under parts white. The throat is finely streaked with dark brown, which changes to a lighter shade and heavier markings on the breast. On the under parts and sides the markings are light brown and take the form of wavy bars. Young:—Under parts marked with dark brown longitudinal spots.



Feather on the left from the breast of an adult bird—on the right from a young bird of the year showing difference in their markings.

NEST AND EGGS.

This species constructs a nest of sticks loosely put together and nearly always lined with bits of moss and bark. The nest is located at various heights; generally from ten to thirty feet although they have been found within three feet of the ground. They appear to favor the dense woodland for their nesting site to a greater extent than most other species. They lay two or three eggs, rarely four, of a grayish ground color blotched with lavender and chestnut. The eggs are laid during May.

HABITS.

This hawk in regard to size is in the intermediate class, being neither very large nor very small. In point of usefulness however they should be placed at the head of the list. They are entirely inoffensive and are



BROAD-WINGED HAWK.



unfortunate in being shot down indiscriminately with other kinds. It has always seemed strange that so many persons can see no difference among the hawks. They appear to recognize but one class, the fowl destroyer. All large hawks are to them "hen hawks" and all small ones "chicken hawks." In their narrow mindedness they consider they are doing the country a favor in ridding it of these imagined pests, and they wonder why the insects are destroying their trees and the rodents their crops. But to return to the "Broad-wings." They feed chiefly on meadow mice, squirrels, grasshoppers, frogs, and beetles, and rarely destroy birds.

Some localities seem to have a strong attraction for them, particularly heavy pieces of woodland near some lake or pond, and they return to the same place year after year. As long as I can remember a pair of them have occupied a small piece of woods near here. Although they have frequently been molested they show no desire to leave. They build a new nest each year, the one of the previous year generally having fallen to pieces during the winter. To my mind the birds are always associated with the creaking of the trees during a storm, their note to me resembling that noise. Others liken it to the notes of the Killdeer. Always during the breeding season, as I enter the wood I am greeted with a "cree-ee" from the farther end. They are very keen sighted and glide away from the nest as soon as the woods are entered, and rarely come in sight even when you are very near the nest. Their wailing cry is continued at intervals until you leave the neighborhood.



Photo by E. E. JOHNSON.

NEST OF BROAD-WINGED HAWK.

NOTES ON A CAPTIVE WOODCOCK.

Towards the latter part of June of the present year (1901) a remarkably fine specimen of an adult female woodcock (*P. minor*) in perfect plumage came into my possession. Some lawless person had evidently shot at it somewhere in the immediate environs of Washington, D. C., and the bewildered bird flew into the very heart of the city, where it was captured. Upon examination I found that it had received but two very slight wounds made by small-sized shot. One was in a middle toe of one of the feet and the other a wing shot; that was not discovered until the bird had been in my keeping a day or so. This latter injury prevented it from making any extended flight, while it admitted of giving it its liberty in the court in the rear of my residence, where it could go about among the flowers and long grass to its heart's content. At the end of a week, however, it made good its escape, but not until every possible advantage had been taken to study its habits in confinement, and I had succeeded in making an elegant series of photographic negatives of it, representing the bird in a variety of attitudes, together with a life-size figure of its head. Two of these photographs have been reproduced to illustrate the present article.

Captive snipe and captive sandpipers and all their near allies are notorious for their extreme gentleness under these conditions, but of all the birds I ever handled in captivity this woodcock was certainly the most so. From the very first it made no attempt to resist my handling or to escape from my holding it. In a few hours it readily ate several large angling worms out of my hand, and drank freely of water as I held it near a large-mouthed bottle I had filled for it. After feeding, it would regard me with its great, soft brown eyes filled with every expression of gratitude,—and surely no bird in all the world has a finer or a more lovely pair of eyes in its head than our woodcock.

After I became the owner of this specimen, it was my hope that it might be possible to find out something not already positively ascertained in regard to the production of its notes, and what sounds its wings gave rise to when excited to rapid motion. But in all this I was doomed to disappointment, for this particular bird could in no way be induced to utter a single note the entire time it was in my possession, beyond one or two little sort of plaintive bleats; while, when it was held by its bill, and its wings set in violent motion, the sound they gave rise to was more like that emitted by a rapidly revolving fan, than anything they produce probably during the normal impulsive flight of the woodcock in its natural haunts. After a few attempts my experiments in this direction were relinquished, and in any event, such investigations should be made upon individuals that had in no way been injured, however slight the wounds might be, and for such purposes woodcocks taken in nets or other kinds of traps or snares ought to be the only kind employed.

In the matter of examining the peculiar mechanism of the distal extremity of the superior mandible however, the opportunity was taken advantage of to the fullest extent, and the observations of others on this subject fully confirmed. It would seem, however, that an anatomical examination of the parts involved, and a research into the physiology of the function of the curvature of the distal end of the upper jaw in any of the true snipe family would not altogether be lacking in interest. For a long time I was under the impression that the well known ornithologist of this country, Mr. Gurdon Trumbull, a member of the American Ornithologists' Union, was the first to publish an account of this power of the woodcock to curve the end of its superior mandible when seizing its food in the soft mire of the bog or marsh, and I so stated in a recent article of mine on "Woodcocks of the Old World" (*Shooting and Fishing*, Vol. XXX, No. 9, New York, June 13, 1901, p. 164.), but I find now I was in error. Professor Alfred Newton of England, upon reading my article in *Shooting and Fishing*, kindly furnished me with the following information on the subject. This distinguished authority states that "Mr. Trumbull was by no means the first to notice the flexibility of the upper mandible in *Scolopacidae*, and the muscular mechanism seems never to have been properly described. In 'Exploration Scientifique de l'Algérie'—*Oiseaux* ii. pl. 9 bis figs. 3, 40, the muscles etc. are delineated in the "Becasseau Guignatee" [qu. *Actitis hypoleucos*?] but there is no description of the apparatus in the text I can find, though under *Scolopax rusticula* the fact is mentioned (ii p. 293). This work bears 1867 on the title page, but the plate was published, I believe, many years before, perhaps in 1857, and the text was printed about the same time."

"R. Hill in Proc. Acad. Phida. 1864 (p. 65) notices the power of inflexion possessed by "*Eud albus*," but a subsequent note (p. 68 note) makes it likely that he had some species of *Numenius* before him. Beckman treated of this subject in *S. rusticula*, Zool. Garten, 1865 (pp. 130-133, figs. I-IV) and it is again referred to in the volume for 1867 (pp. 445-448), Journ. f. Ornith., 1867, pp. 110-112 and Ibis 1868 (p. 109) as well as in Hoffman's Monograph (Die Waldschaeffe, 186, ed. 2, 1887). The matter needs further investigation, which it well deserves." This communication of Professor Newton's was dated at Magdalene College, Cambridge, England, June 25, 1901, and is a very helpful bibliographical notice of the subject. It will not however be touched upon further in this place, whatever the writer may do with it anatomically in the future.

To return to the live specimen here being described, it was very interesting to watch it as it cautiously skulked through the long grass in my yard, or stalked among the more open places where the flowers grew. Many of its motions were doubtless the same as those it went through in



Photo by Dr. R. W. SHUFELDT.

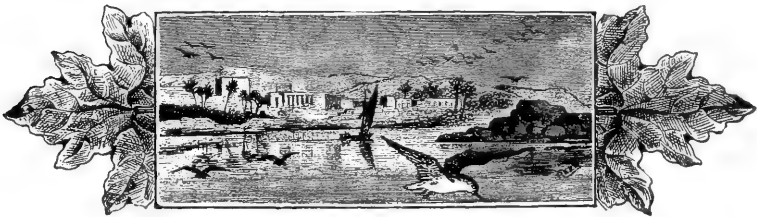


Photo by Dr. R. W. SHUFELDT.

its natural haunts. It resorted to one however, that I had never noticed before in the wild bird in nature, that is where it was performed half so well. When somewhat cornered in the open air and looking about for the means of escape, this bird strutted along like a little turkey cock, dragging its wings along the ground as it stretched them downward at its sides. At the same time the head was drawn well back and depressed between the shoulders, while the beautiful subcircular tail was spread out to its full extent, bent far forward, so as almost to conceal the major part of the back. It was a pretty sight to see it thus walk off, and the instant it came near any suitable cover to reverse the position of the tail, putting it almost completely out of view as it was directed backward, and with head and neck extended forward, it, with marked cunning, ran into the place of concealment, either to squat down or to stand perfectly motionless when it thought it was no longer observed. (Fig. 2). Of course, it is a well known fact that when on the ground, in situations favorable to it, its color markings assist to protect and conceal it admirably. Among other things this applies especially to the three transverse dark brown bands on the top of the head, which for all the world resemble the shadows of the reeds or blades of grass in the vicinity of the place of the bird's concealment (Fig. 2).

In obtaining the life-size photograph of the head of this bird shown in Figure 1, of the present article, it was taken instantaneously as the bird stopped for a instant in a walk down a short stretch of turf I had prepared for it, in front of a white back ground, in order to cut off all surrounding objects. It is an excellent portrait of *Phalohela* as it momentarily stands in such an attitude, and doubtless as fully awake to everything going on about it as though it were enjoying the solitude of some favorite retreat in a shady creek-bottom, a branch of the upper Potomac.

DR. R. W. SHUFELDT, N. Y. City.



SPOTTED SANDPIPER.**A. O. U. No. 263.***(Actitis macularia.)***RANGE.**

The entire North America. They winter in the southern states and in Central and South America. They breed throughout temperate America, more abundantly in the central and eastern parts.

DESCRIPTION.

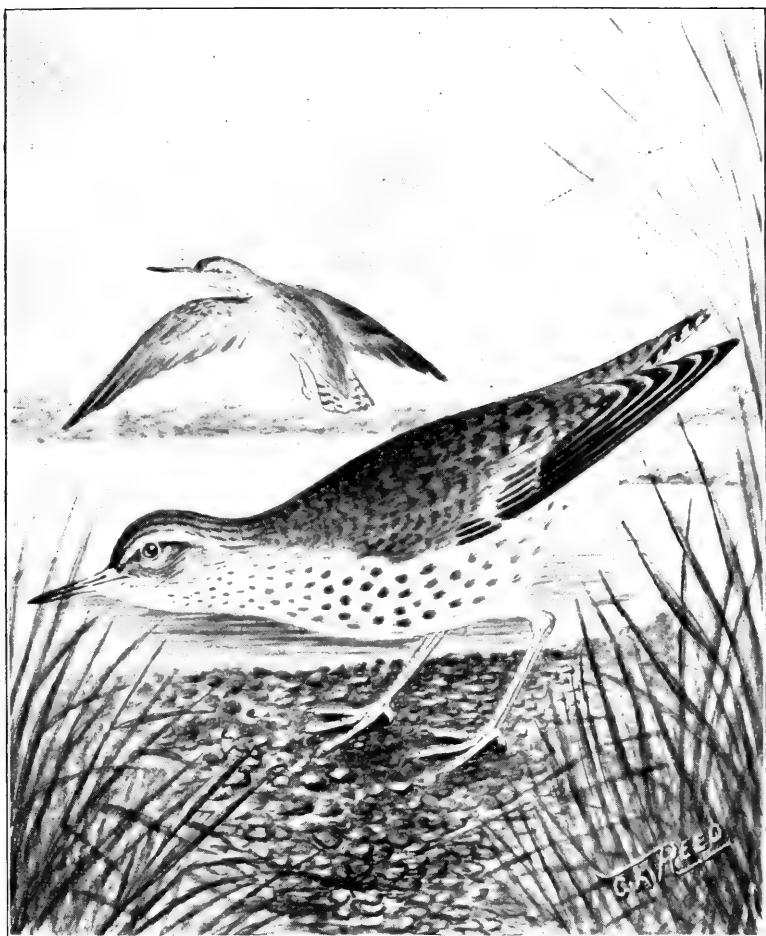
Length, 7.5 in.; extent, 13.5 in.; tail, 2 in. Bill and feet, flesh color, the former being tipped with black. Eye, brown. Head, neck and back, olive brown, slightly glossed. Head and neck stretched longitudinally, and the back and rump crossed with wavy black lines. Throat, breast and under parts white, spotted with dark brown. The wing coverts like the back; primaries brown with a spot of white on the basal portion, which shows only when in flight; secondaries edged with white. The outer tail feathers barred with white.

NEST AND EGGS.

The Spotted Sandpiper breeds during the latter part of May and early June. You may look for their nests in the grass just above high water mark along the sea coast, or near the edge of ponds or pools, and in the grass bordering on some cultivated field. The nest is formed of a few grasses. The three or four eggs are of a buff color spotted and blotched with reddish brown and black.



NEST OF SPOTTED SANDPIPER.



SPOTTED SANDPIPER.



HABITS.

The "Peet-weet" of the Spotted Sandpiper is a familiar sound to every one who has traversed the fields near some body of water. Well known too is their habit of teetering and the names "Tip-up" and "Teeter-tail" are both suggestive of this habit. Why they indulge in this performance is a mystery. It can hardly be a sign indicative of either anger or pleasure as the same exercise is repeated at frequent intervals either when alarmed or when supposedly they are contented, as when they are feeding. I have watched a "tip-up" for fifteen or twenty minutes, standing on a lone rock some six or eight feet from shore, turning this way and that, and appearing to make the most profound bows of admiration to his reflection in the water. The sandpiper is an affectionate parent and holds very closely to her nest, and if forced to leave feigns lameness. They rarely fly in a straight line, but make a wide curve from one point on the shore to the other. At the commencement of their flight their wings are flapped with a slow but powerful motion and barely raised above the level of the back. Before alighting they sail with fixed pinions for some distance. One June day as I was silently riding my wheel along a country road, I heard the low musical "peet-peet" of a sandpiper. I dismounted and walking carefully up to the stone wall looked over. Evidently the field had been cultivated the year before, for grass was lacking and only a few weeds together with numerous stones covered the ground. As the call was repeated, I located the sound and saw one of the prettiest sights to be imagined;—that of a Sandpiper and three young. The little ones were not far enough advanced in sandpiper ways to have acquired the teetering habit, but they did know how to catch insects. Now and then two of them would spy a wholesome grub at the same instant and a lively race would ensue. To the credit of the loser in the race, it may be said that he accepted his defeat in good humor, unlike many children I have seen. Wishing to become more closely acquainted, I climbed carefully over the wall. The watchful eye of the mother perceived me at once, and a warning note sent the little ones scampering in all directions, and they concealed themselves so that if I had not watched one of them closely, I should not have found any. Going directly to the spot where I had seen one disappear I found him nestling closely to the side of a stone, and perfectly motionless. He was a cute little ball of gray down, streaked with black. When I released him, he ran about four feet and hid himself effectively beneath a weed.

OLD METHODS vs. THE NEW.

During the past summer there appeared a new book, describing a new method for the study and photography of birds. This method was to cut down and remove the branch containing the nest and young, to a convenient place, near by, in the bright sunlight, and erect beside it a tent from within which the observer could watch the birds, who overcome by the desire to care for their offspring would finally come to feed them in their new situation.

Verily, the lot of the birds is a hard one. No sooner is one enemy disposed of than another appears in his place. I venture to say that no book that has yet been published can produce the harm to our birds that this one is capable of. I have examined the book thoroughly and fail to find one logical reason as to why this method should prove beneficial to the study of bird life.

Most birds are extremely sensitive, and at least one-half of them will desert a nest if it is removed. Besides the danger to the young from the desertion of the parents is another equally as great. In order to successfully photograph a live bird, it must be in the bright sunlight. The heat of a summer sun is very intense, and consequently fatal results are apt to follow from this method, in fact the author mentions that the occupants of three nests out of twenty-six upon which he experimented, died from the heat or storms. It is safe to say that from the care they will receive from most followers of this method the mortality will be much greater. These facts should condemn this method at once, even if the danger from their other enemies were not increased by leaving them in such an exposed position.

Even supposing that there were no bad results, where are the advantages from this new method? If a person be not too critical and sentimental, the pictures in this book are pretty. But where is the beauty in a picture when the leaves are all wilted and dying, and of what value is a photograph depicting a bird standing over her nest, with bill open gasping for breath,^s and feathers standing on end in the vain endeavor to keep cool and also to protect the little ones from the heat? It certainly shows the birds' devotion to their young, but it is not nature, as nearly all birds protect their nests from the sun by overhanging leaves. Photographs from life to be of value must show a bird attending to its duties in a natural manner, and such cannot be obtained under these conditions. Furthermore, with a camera, a field glass, a long string or tube to release the camera shutter, and an assistant with a mirror to throw the light where wanted, there are few nests so situated that photos of the old birds feeding the young cannot be obtained without disturbing the nest or branch.

But the height of folly is reached when, as to my knowledge has been done a number of times this season, a person uses this method merely for observation. He hasn't a possible excuse to offer for the destroying of a bird's happiness and perhaps also its home.

Every act of a bird that is seen at the nest in its unnatural situation, can, with a pair of field glasses, be observed equally well from a distance and without disturbing the nest from its original site. Really, I should be ashamed to see my name attached to an article describing how I had, despite the agonizing cries of the parent birds, cut down a nest and removed it fifty or sixty feet away, just to see if they could find it again, and have to show, as an offset to the tortures to be endured by the young, only a few notes describing how often the little ones were fed.

Now I want to say to all readers of A. O.:—If you want to study or photograph the home life of wild birds, *don't remove the nest or branch* from its natural situation, and do what you can to discourage others from doing this.

This is an era of protection, and while the "*New Methods*" might have proved a success years ago it is sadly out of place now.

AT THE HOME OF THE ROBIN.

WITH PHOTOS FROM LIFE.

At about eight o'clock on the morning of May 27th there boarded a certain suburban electric car, a man loaded down with several suspicious looking packages. In fact he was a burglar. As the car sped on its way he was forming plans to rob a home. The burglar left the car at the nearest point to his destination, and continued up a side street until opposite an apple orchard. The home he sought was some distance from any other house, and was occupied by a middle aged couple and three children.

After having gone nearly through the orchard, this man came to a stop under a tree and proceeded to undo his bundle. First appeared a large mirror, a camera, tripod, and the traveling bag was filled with a miscellaneous lot such as nails, twine, hammer, etc. A strange outfit for a burglar? Well, the fact is the burglar was the writer who had planned, without the owner's consent, to steal a likeness of the robin whose nest was in the tree overhead. After having got the camera in readiness I climbed the tree and, by the way, I was thankful that ivy had no terrors for me as the tree was covered. You all probably know that a robin is a very noisy bird if frightened from the nest, and I can assure you that if I had been a bonafide burglar, and the inmates of the house had given me the reception that I received here, I should have beaten a hasty retreat. It



INSPECTING THE CAMERA.

my liking the sky had become overcast with clouds, and my hopes of getting a good negative were dimmed. I withdrew to about forty feet and with bulb in one hand and field glasses in the other, I waited for further developments. The female was very much excited, and continually flitted from tree to tree scolding loudly. The male on the other hand seemed to take a philosophic view of matters, and regarded the camera curiously from the next tree. By the way the camera was covered with a gray cloth and was only two feet from the nest. Soon he ventured to come to the outer branches of the tree containing the nest, and a little later hopped up on the side of it. The instant he touched the nesting branch, up went three heads with mouths wide open, each eager to be served first. Alas they were all doomed to disappointment this time for Mr. Robin had merely come to see what damage had been done by the queer looking box, that was perched so near



WORMS FOR THE LITTLE ONES

took only a short time to draw up the camera and tie each tripod leg to a branch thereby making the whole outfit really more secure than if standing on terra firma. By the time I had everything arranged to



CLEANING THE NEST.

Finding it rather tiresome climbing the tree to insert a new plate after each exposure, I decided to remain in the tree to watch operations more conveniently. Although I was in the same tree and only about twenty feet from the nest the male Robin paid no attention to me and came to feed the young about every five minutes. From my elevated observatory I watched developments at the nest for several days, and I doubt if Mr. Robin will ever forgive me, for he had to do all the work while I was about. Although I left the nest for hours at a time with the camera about four feet from it, I could not induce the female robin to return although the male showed no hesitation whatever. Of the many photos taken at this nest, four are reproduced herewith. The three smaller pictures were snap shots on a sunny day at four feet distance, and the other was taken on a cloudy day, one-fifth sec. exposure, and at a distance of two feet. I have spent many pleasant hours during the past summer, camped near various bird homes, and can assert that there is no more beneficial or instructive recreation open to the American public than this.



to his home. Finding everything as usual, he decided to get some worms for his hungry little ones, but not before I had pressed the bulb and made one exposure. As I had expected this and the three other exposures that I made were so much undertimed that they were not satisfactory. At my next attempt, made several days later, I changed my plans slightly.

AMERICAN BITTERN.**A. O. V. No. 190.***(Botaurus lentiginosus.)***RANGE.**

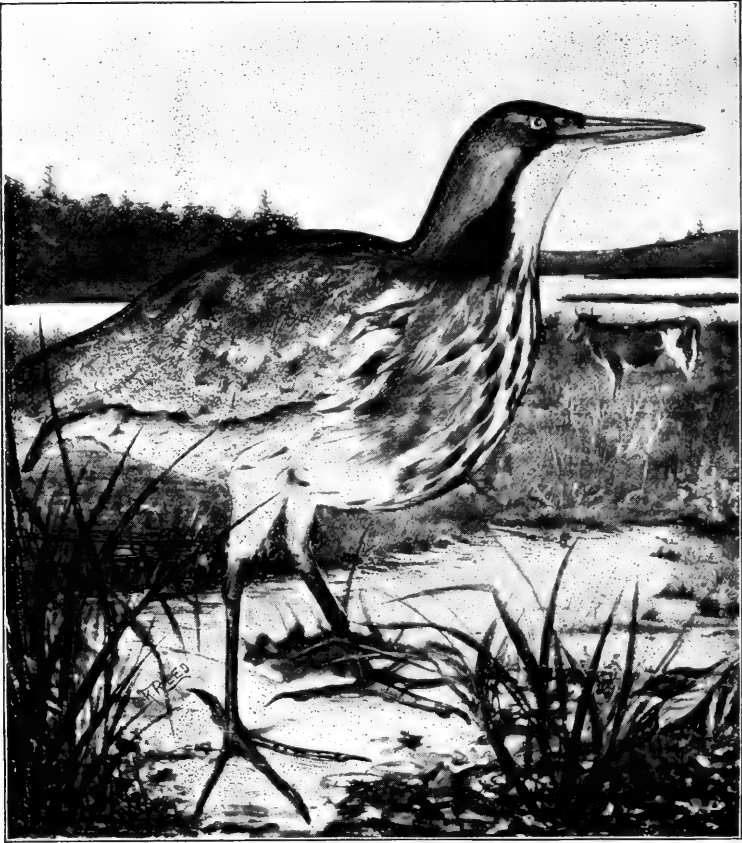
The United States, southern Canada, and the West Indies. Breeds throughout temperate North America.

DESCRIPTION.

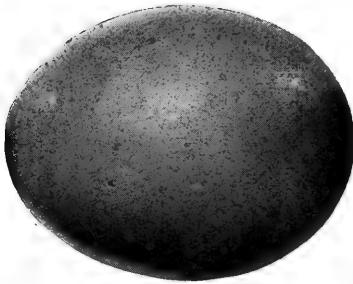
Length, about 30 in.; extent, about 40 in.; tail, 4 in. Bill, brownish black above and yellowish green below. Eye, yellow. Legs, yellowish green. Back, wings, and tail mottled with several shades of brown, black and yellow. Top of head brown. A buff stripe over the eye. The adult birds have a large velvety black patch on each side of the neck. The under parts are whitish, each feather having in the center a black edged stripe of brown. The feathers on the breast are somewhat lengthened.

NEST AND EGGS.**NEST OF AMERICAN BITTERN**

The nest is on the ground in a marsh or bog. I have found them where the nest was lined with a few grasses, but nearly all are simply a natural hollow in the ground. The eggs are laid about the middle of May. They number three or four and are of a plain brownish color, unspotted.



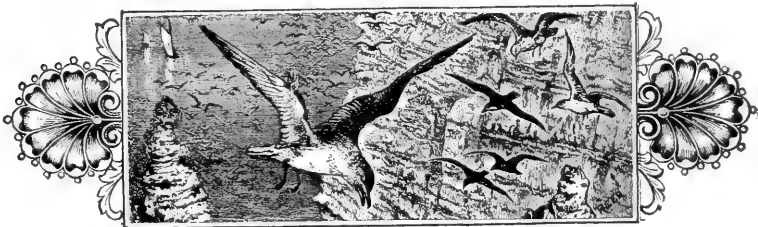
AMERICAN BITTERN.



HABITS.

All birds have their peculiarities, and this one is no exception. The most interesting and extraordinary performance of the Bittern is his singing, if it may be designated as such. Because of his vocal abilities he is often known as "Stake Driver," "Thunder Pump," and "Indian Hen." This performance has been described time and again, but the best explanation of a witness of the action, is that of Dr. P. L. Hatch in the "Birds of Minnesota." The act of a Prairie Hen cock in booming, the Turkey Gobbler in gobbling, is no more extreme or characteristic than is that of the Bittern in the act of disgorging himself of his inexpressibly infelicitous love notes. Standing perfectly erect and motionless, his bill pointed exactly towards the zenith, the head is seen to be very slowly sinking while the body correspondingly assumes the horizontal position and the neck becomes sigmoid by its double flexion, it suddenly shoots forwards and downwards and laboriously pumps out its amorous utterances, doubtless to the entire satisfaction of the waiting ear, whether the mate's or another masculine representative of the species, that accepts the challenge to come over and get most ingloriously thrashed. Aspectively the performance is suggestive of strangulation until "Kunk-ah-whulnk" has all been ejected.

The Bittern prefers a marshy locality and as a rule may be found where the footing is treacherous. He likes to build his home on the center of some bog where in order to reach it one must risk taking a sudden bath in several feet of slimy water. When not hungry they are lazy birds and instead of flying will try to escape by running through the tall grass, that is if they do not stand perfectly still and try to escape observation by passing themselves off as one of the rushes. If you come upon them suddenly, they will start up with a croak, as though disgusted at being obliged to fly. They are remarkably adept at catching frogs and can strike a powerful blow with their large beaks. Their flight is slow but easy, and at a distance while on the wing they do not look unlike a large hawk except that their wings are rather broad.



FIGHT BETWEEN TWO CROWS AND A FOX SQUIRREL.

About three o'clock in the afternoon of a bright sunshiny day in June, I was taking a pleasure ride on my wheel in Garfield Park, one of the Cleveland public parks, I was riding along the main driveway which is lined with tall oaks, cedars and maples when I heard a loud screeching from overhead.

I got off my wheel and looked about to see where it came from, when suddenly I saw a large crow fly upwards from a tall oak, whirl about and dart down at something in the top of the tree. Its mate soon did the same as the former.

I tried to discover the cause for this funny performance by walking around the tree and peering through the places where the foliage was scarce. Near the top of the tree I could see a nest which the crows seemed to be trying to guard against some intruder, but could see no cause for their funny performance and making such a racket.

I was just going to get on my wheel and ride off, when I saw the crows fly downward from the top of the tree and pick at something which seemed to be coming down the tree. I now thought it must be a snake as I had often heard of snakes climbing trees to get birds eggs. I waited a minute and a large fox squirrel came running down the side of the tree and stopped on one of the lower branches which was about thirty feet from the ground.

I now found out the cause of the crows acting so. The squirrel had been after the eggs in the nest and the crows had been trying to defend their nest from him.

The crows not satisfied with driving the squirrel from their nest came darting at him again. The squirrel in trying to defend himself from their attack lost his balance and fell to the ground.

I thought he must be hurt so I ran toward the spot where he lay to see if I could catch him and see how badly the crows had hurt him. I got within about seven feet of him when he jumped up and ran to a nearby tree. I got near enough to see that the crows had in several places pierced through his skin and pulled off quite a bit of his fur. The place on which he fell on the ground was a spot of blood from the wounds the crows had given him.

J. F. Goss, Ohio.

Guy Emerson of Duxbury, Mass., reports seeing a partly Albino Robin, the tail, wings and head being nearly a pure white, while the body was the usual robin color. It was with several other robins and was last seen on July 19th.

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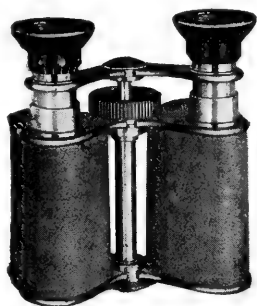
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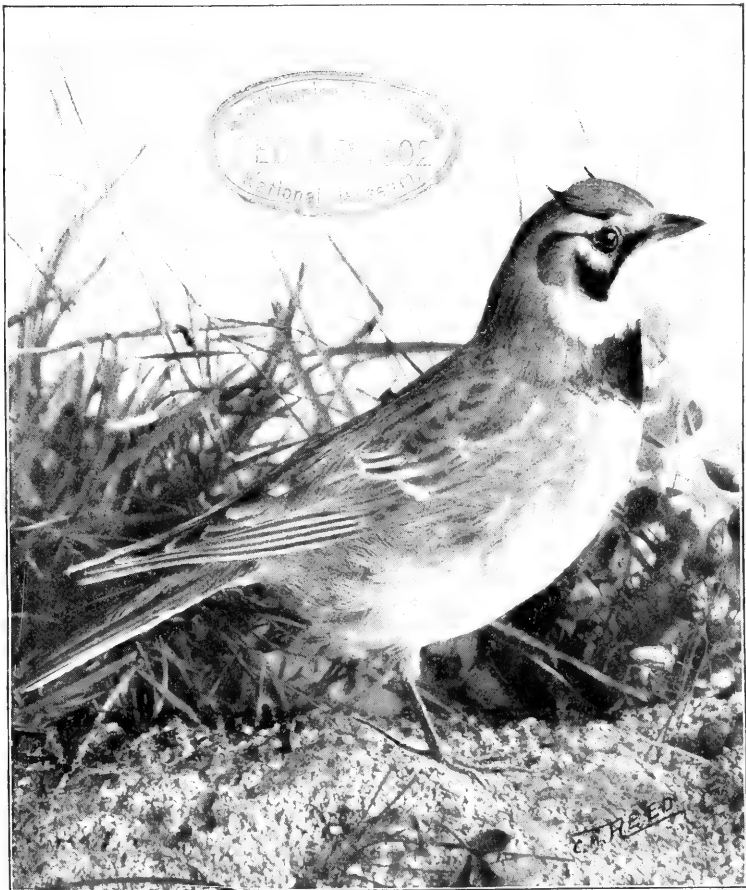
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Vol. I.

December, 1901.

No. 12

HORNED LARK.

A. O. V. No. 474.

(Otocoris alpestris.)

RANGE.

Northeastern North America. In winter south to Eastern United States.

DESCRIPTION.

Length, 7.5 in.; extent, 13 in.; tail, 3 in. Above and on the sides, pinkish brown. Wings and tail, brown, the former edged with pinkish, and the outer feathers of the latter, white. Forehead, line over the eye, and throat, pale yellow. Crescent on breast, patch extending from bill to below eye, and bar on top of head, terminating in ear tufts, black. Below white.

NEST AND EGGS.

The nest is a deep cup shaped structure of grass placed on the ground generally in marshy places and concealed by moss or tufts of grass. Their eggs are three or four in number, grayish white, and speckled with brown and dark gray. Their breeding range is north of the United States.

HABITS.

These birds are perhaps more commonly known by the name of Shore Lark rather than Horned Lark. They are rather common winter residents in eastern United States. They come to us from their northern breeding grounds about the first of November, and can be found, especially near



HORNED LARK.



the sea coast, in flocks of from ten to twenty or more. They frequent sandy or marshy places where they can procure seeds of the various weeds and grasses. When the snows cover their feeding grounds, they quite frequently take to the country roads or visit farm yards where they can procure food. They appear to be entirely a ground bird, and are rarely seen perched even as high as a fence post. When alarmed the whole flock arises in a body, with shrill whistles, and after circling about alight not far off. In this respect their behavior is different from that when at their breeding grounds, at which time they will escape by hiding rather than by flying. About the latter part of February or early March, they leave us for the locality that is home for them. As the flocks go northward they disintegrate, and one or two pairs will settle down in a locality. Their manner, which during the winter is suspicious, is now confiding and cheerful. Dr. Cooper says that in May and June the males rise almost perpendicularly into the air until almost out of sight, and fly around in an irregular circle, singing a sweet and varied song for several minutes, when they descend nearly to the spot from which they ascended.

According to Audubon, these larks breed abundantly on the high and desolate tracts that abound along the coast of Labrador. These rocks are covered with large patches of moss and lichens. In the midst of these, this bird places her nest, disposed with so much care, and the mosses so much resembling the bird in hue, that the nests are not usually noticed. When flushed from her nest she flutters away, feigning lameness so cunningly as to almost deceive any one not on his guard. The male at once joins her and both utter the most soft and plaintive notes of woe. The nest is imbedded in moss to its edges and is composed of fine grasses circularly disposed and forming a bed about two inches thick. About a week before they can fly, the young leave the nest and follow their parents over these beds of mosses to be fed. They run nimbly and squat closely at the first approach of danger. If observed and pursued, they open their wings and flutter off with great celerity. It is said that in their breeding grounds the male birds are very pugnacious, fluttering, biting and tumbling over one another in the manner of English Sparrows. Their long, sharp hind toes are very apt to inflict serious injury to one another. There are many sub-species of these birds in different sections of the country, and in localities where two or more kinds are to be found, it is very confusing, even to experienced ornithologists to distinguish one from another owing to the very slight differences between them.



RED-BELLIED WOODPECKER.

RED-BELLIED WOODPECKER.**A. O. U. No. 409***(Melanerpes carolinus.)***RANGE.**

The United States east of the Rocky Mts. and south of New England, New York, and Michigan. It is seldom found north of these boundaries.

DESCRIPTION.

Length, 9.5 in.; extent, 17 in.; tail, 3.5 in. Eye, reddish brown. Bill and feet, horn color. Top and back of head, crimson red, shading to whitish on the forehead. Sides of head and middle of the belly tinged with reddish. Back, wings, and tail, black, closely barred with white. Under parts, dull white. The female differs from the male in plumage in having the red on the head restricted to the back part, the crown being ashy.

NEST AND EGGS.

During May, this bird lays from four to six glossy white eggs. They are deposited on the bottom of cavities in almost any variety of tree. They do their own excavating for a nest, and occasionally bore into a sound limb. The entrance when newly made is small and nearly always perfectly round.

HABITS.

The subject of this article is one of the most strikingly marked, and certainly is one of the most handsome of the entire Woodpecker family. He has the same general colors that are found on many of the family, but their arrangement is unique, and has given him the name of "Zebra Bird." They are distributed very locally; in some sections they are very abundant, while in others they are very rare. According to Audubon they were confined to the denser forests and were very shy. Now, especially in the south they are very abundant and are no more timid than the other members of the family, frequently coming about the farm houses for food. There is an old saying to the effect that fine feathers do not make fine birds. This bird surely has fine plumage, and I think that on the whole, we will agree that he is a fine bird, although he may not be as useful a one, as some others of the woodpecker family. It has been found that he feeds only to a small extent on insects, and that the greater part of his food consists of animal matter. The orange growers in Florida have given these woodpeckers the names, "Orange Sapsuckers" and "Orange Borers," and say that they eat the oranges and suck the sap from the trees. I do not think we can blame the birds for their choice of food, though if they were especially abundant in any one section, the fruit growers might see their profits vanishing rapidly.

Mr. Warren in his book, "Birds of Pennsylvania," says:—"I examined two dozen or more oranges which had been attacked by the woodpeckers and found that all had been bored about midway between the stem and blossom end. These holes, always round, varied greatly in size. The birds usually, I think, pick off the skin from a space about the size of a five cent piece and then eat the pulp. On one occasion I saw a Red-bellied Woodpecker eating an orange. He evidently recognized the fact that it was about the last of the season, as he had enlarged the opening sufficiently that his head was almost entirely hidden in the yellow skin, from the sides of which he picked the few remaining particles of pulp. I was shown orange trees that these sapsuckers were said to have bored. These borings, however, did not appear to injure the trees, as they seemed to me to be equally as flourishing as other trees whose trunks showed no marks of a woodpecker's bill."

Probably the loss to the fruit growers is more imaginary than real. I figured in a case of this sort this summer. While crossing the corner of a three acre field of grass, the owner held me up. We had a lengthy argument in which he severely scored all gunners and camera fiends, and if his estimate of the damage done in the short distance I had traveled was correct, my shoes must cover over an enormous amount of territory. For my part I would gladly give up the pleasure of eating a few oranges for the benefit of these handsome birds, and would gladly welcome them to Massachusetts, although as yet I believe they have not been recorded, at least in Worcester County.

ALBINO BLACKBIRDS.

Between the widening fork of Lowell street and Massachusetts avenue lie the Great Meadows of East Lexington. They are surrounded by sunburned fields which make the electric cars seem far away; and here the flowers bloom and the birds sing as though in a remote wilderness. If an ornithologist once visits this place, he will remember it for it is the resort of many of the rare ducks and waders, and one is sometimes startled by the wierd cry of the loon. One day this past spring while walking along the shore I noticed several blackbirds in some button bushes, and creeping near without letting them sight me, what was my surprise to see among them, two birds with singular plumage. The head, throat and upper part of the back was white, and the wings and tail feathers tipped with black. Some of the birds flew deeper into the marsh but the albinos remained, and presently uttered the "tchuck, tchuck" followed by the liquid "conga-ka-ree," though when one of them flew to a dead tree, he showed no scarlet epaulette. I continued to watch them until they took flight, with a happy sense for the moment, that nature had favored me with the sight of a white blackbird.

WILSON H. FAY.

IN THE OLD APPLE TREE.

When God had made a host of them,
 One little flower still lacked a stem
 To hold its blossom blue;
 So into it he breathed a song,
 And suddenly with petals strong
 As wings, away it flew.

JOHN B. TABB.



Photo from life.

A sweet melodious warble, a flash of blue, and there upon the decayed end of an apple tree bough, sits one of our most welcome summer guests, the Bluebird. Surely fortune smiles upon us today, for the nest hole is barely above our head. How could a location be more convenient for the use of the camera? To be sure the hole is on the north side of the tree and consequently out of the sun, but we are prepared for that and soon, by means of reflected light from a mirror, the place is as light as if in the bright sunlight. When we have the camera set up in readiness for business, and the mirror readjusted to make allowance for the shifting of the sun, we will hide behind the next tree and see what the anxious parent birds will do. As the male bird flits to and fro in the sunlight his blue coat is dazzling in its brilliancy. His sombre colored, but equally melodious mate is intent upon examining her household, but cannot quite satisfy herself that the large box, so uncomfortably close to her head-

quarters, is not some sort of a trap. Each successive move brings her nearer to the desired goal, and at last she lights upon the edge of the nesting hole. Instantly a sort of dazed expression comes over her. Something is wrong. She looks first at the dazzling reflection down in the grass behind her, and then at the sun which is still doing duty in its proper location for the time of day. Evidently the problem is too great for her to solve or else she has not the time now, for she has disappeared down the hole. In a moment she reappears and flits to a dead limb on the top



of a near tree. This limb appears to be the favorite perch for Mrs. Bluebird, and is used as a lookout. As soon as she sights a grasshopper or caterpillar, she drops down upon it and bears it away to her young. In this case it is the male bird that shows the greatest fear. He positively refuses to have his picture taken and will not go to the nest while the camera is near. He shows, however, that he is willing to work and that it is only fear of the camera, or that mysterious sun in the grass that pre-



vents his doing his duty. He will get a choice morsel, carry it to a branch, perhaps three feet from the nest, and there wait for his mate to come and carry it the remaining distance. Rather ungallant for Mr. Bluebird to expose his mate to fancied dangers which he dare not face. Later, however, he atones for his lack of gallantry. Owing to the convenient situation of the nest, we soon have all the photographs that we desire, so

we will remove our outfit and retire a short ways and watch these gentle housekeepers. Soon the female enters the nest and remains, while he shoulders the responsibility of procuring food. He makes longer journeys than his mate has, and sometimes is away ten or fifteen minutes. A tremulous warble announces his approach, and he plumps down woodpecker fashion on the edge of the hole and delivers to his mate the prize he has found. After seeing that it is safely fed to the young, he starts on another search. I had intended to obtain photos of the young when they were just able to fly, but owing to a mistake in my calculations, I arrived there the day after they had gone and found the nest empty. The patience and industry shown by our common birds at this period is amazing. With the nest building, incubation of the eggs, and the care of the young, they hardly have a moment's leisure from the time of their arrival in the spring to their departure in the fall.

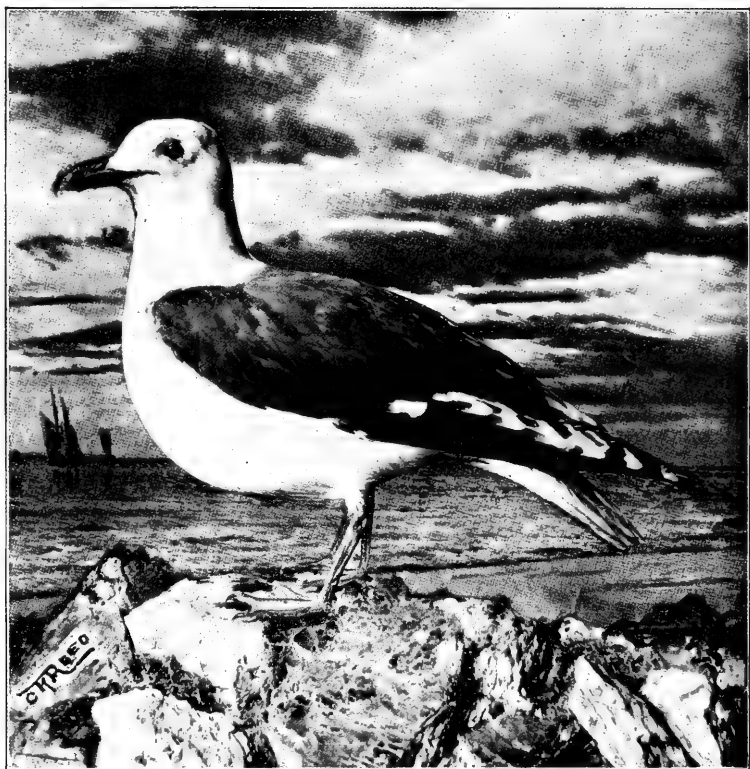
C. ALBERT REED.

TRUE ADMIRATION.

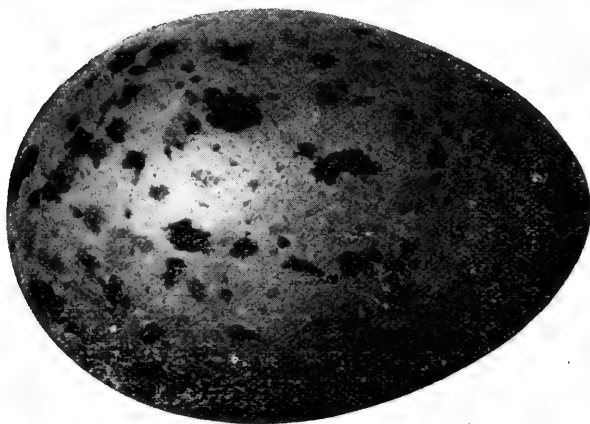
Truly the birds admire the beautiful in nature. Just notice their homes. I have seen some wonderful ones this summer, showing the beautiful artistic natures of the birds who built them.

I have often heard it said that "a man could find what he was looking for," but I began to think it did not apply to a woman, for all summer I have looked for the nest of a humming bird; but on the tenth of July my eyes just feasted on a little cotton nest all covered with lichens about twenty feet from the ground, on a small limb of a large maple tree. I think I never should have seen it but for the evident admiration of a yellow-throated vireo. He hovered near the nest singing soft little love songs, looked it over from either side, fluttered over it with quivering wings, vibrating so rapidly, then flew to one side singing his most beautiful song, then back again repeatedly showing his admiration. The little hummer had left the nest and I could not leave it longer in the tree to watch, for fear of its being demolished. O, that I could interpret those soft cooing notes that he uttered repeatedly. Was it not true admiration? From my own feelings, when the nest was finally in my hands, I think I can fully appreciate the little vireo's ecstasy, for a daintier little home I am sure could never be found. I wonder if other birds stop to look and admire these dainty little homes?

REST H. METCALF.



GREAT BLACK-BACKED GULL.



GREAT BLACK-BACKED GULL.*A. O. U. No. 47.**(Larus marinus.)***RANGE.**

The Atlantic coast from Maine northwards in the summer, and south in the winter as far as Long Island.

DESCRIPTION.

Length, 30 in.; extent, about 5.5 feet; tail, 7 in. Adult in summer:—Bill, yellow, the lower mandible having a crimson spot near the end. Eye, yellow; eyelid, red. Legs and feet, flesh color. The head, neck and tail, and under parts, pure white. Back and wings, dark gray, almost black. Primaries, secondaries, and coverts tipped with white.

In winter the head and neck are slightly mottled with gray.

Young:—Bill, black; feet, brownish. Upper parts, dark brown mottled with white and buff. Under parts mottled with white and gray, being lighter on the throat.

NEST AND EGGS.

These gulls breed during the latter part of May and June on the numerous small islands along the Atlantic coast, north of the United States. Their nests are rather large structures of dry grasses. They generally lay three eggs, the color of which varies from a bluish gray to an olive brown, and blotched with reddish brown and gray.

HABITS.

Old Saddle-back is the name by which this large gull is known to nearly all Atlantic fishermen. This name is applied to him because of the saddle like appearance of the dark gray mantle resting on his back between the white head and tail. He is one of the most tyrannical of all the water fowls, and does his own will at all times, irrespective of the rights of any other bird. He is a very powerful bird and those that can dispute his title to "king of the seas" are few in number.

The Great Black-backed Gulls are not as sociable as most of the others of the family, and rarely do more than eight or ten pairs occupy the same island. They have a very keen sight and although they are not afraid of any other bird, they always, unless by accident, keep at a respectful distance from mankind. In this respect they are sometimes useful to others of the water fowls that are less suspicious, acting as sentinels for them. They do not by any means do this as a matter of accommodation; it is simply that they are looking out for their own safety. In fact, instead of doing any of their neighbors a favor, they are always looking for a chance to rob them of their eggs or young. They feed on fish, shellfish, eggs and meat, either fresh or otherwise. Many a member of the duck family, wholly unable to cope with this powerful antagonist, has been compelled

to desert her nest and witness its complete destruction, in order to satisfy the greed of this bird pirate. Like many other birds whose character is similar to these they are graced with good looks, in fact, I think they are fully as handsome as any other member of this graceful family. Their flight is powerful and majestic. At times they float aloft on motionless wings, wheeling round and round in a chain of circles. They float buoyantly and swim well. No marine view would be complete without a few individuals of the gull family, either wheeling about in graceful circles or seated on the surface of the water, and rising and falling in unison with the waves. None of the gulls have a very musical note, and this one's is rather less so than the others. It is characteristic of the disposition of the bird; a coarse, gruff "kac, kac, kac," a note that penetrates a considerable distance. They are not very particular about the character of the islands that they choose for their homes. Probably the chief factor in their choice is the proximity of a good food supply. Some build their nests on high rocky islands, which are also the breeding places of murre, cormorants, and numerous smaller gulls, while others will construct a house for their young on some low, sandy, and marshy island, in company with many terns and Herring Gulls. These latter, murderers themselves, to a considerable extent, now have to suffer the penalty for their wrong doings. The Saddle-backs lose no opportunity to rob the nests of their smaller neighbors, indeed they are not above stealing the property of their own kind. Quite frequently the devastation is made more complete; a fisherman's boat anchors under the lee of the island; after its departure not an egg that bears any semblance of being fresh, remains on the island. These eggs and those of the murre are considered a delicacy by the fishermen, and the islands are frequently raided. The birds do not lose a great deal of time bewailing their loss, but go ahead and lay a second set, and if necessary, a third.

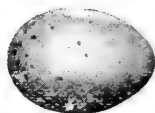
PLUMAGE A PROTECTION.

May we not see protective wisdom in the way nature clothes her birds, giving them plumage to harmonize with their natural surroundings, as though to protect them from the keen sight of their enemies? Thus many of the small birds that flit among the foliage are distinguished by beautiful colors, while those that run upon the ground are generally marked by neutral tints. Quails, partridges and grouse are colored like the ground, being of a speckled or brownish hue, and are seen with difficulty when sitting or standing among the berry bushes, or gleaning their repast in the cornfield. Too small to defend themselves, their colors are adapted to protect them by concealment. The sparrows and larks that build upon the ground are plainly dressed; and the thrushes, which are equally neu-

tral in tint, build in low bushes and take their food chiefly from the ground. Water birds are generally gray all over, except a tinge of blue in their plumage above. Ducks, however, are many of them variegated with green and other colors that harmonize with the weeds and plants of the shore upon which they feed. Bright colored birds in nearly every case frequent forests and leafy trees. Among familiar examples of these are woodpeckers, the blue jay, and the cardinal grosbeak. Many of the singing birds, as the finches and buntings, find most of their sustenance in the grasses; but high colored ones, like the purple finch and red poll, usually build in trees. Conspicuous for their brilliant colors are the golden oriole, the scarlet tanager and the American goldfinch. All of these species build their nests in trees, and seldom run on the ground. The goldfinch feeds upon the seeds of compound flowers which are mostly yellow. His plumage of gold and olive allow him to escape the sight of his enemies while picking seeds from the disk of a sunflower, or from a cluster of golden rods. The species that frequent our shrubbery are of a brown or olive brown of different shades. They are dressed in colors that blend with the general tints of the ground and herbage while they are seeking their food or sitting upon their nests. Birds, however, do not differ much in the hidden parts of their plumage. Beneath they are almost universally of grayish or whitish tints, so that while sitting on a branch, anyone looking upwards can scarcely distinguish them from the hues of the clouds and the sky and the grayish under surface of the leaves of the trees. But why, it may be asked, are the females more plainly dressed than the males? Perhaps it is because the female performs the duties of incubation, and if she were brightly colored, she would be more readily descried by birds of prey while sitting on her nest. The male bird on the contrary, while hunting among the blossoms and foliage of the trees for insect food, is not so readily distinguished from the flowers, for in the temperate latitudes the breeding season is the time when the trees are in blossom. Again at this season of courtship among the birds, nature has given the males a more brilliant costume. Thus the bobolink changes his winter garment of yellowish brown for one of gorgeous straw color and black; and the red-winged blackbird casts off his tawny suit for one of glossy jet, with epaulettes of scarlet. After the young are reared and the flowers have faded, they dispense with their brilliant colors and assume the plain hues of the female. And as with the birds so with the insects. The toad is colored like the soil of the garden, while the colors of the common frog that lives among the green rushes and aquatic mosses are green. The tree frog is of a mottled gray, like the outer bark of old trees. Grasshoppers are generally greenish; but there is a species found among the gray lichens on our rocky hills, which is the color of the surface of these rocks.



CALIFORNIA PURPLE FINCH.



CALIFORNIA PURPLE FINCH.*A. O. U. No. 317a.**(Carpodacus purpureus californicus.)***RANGE.**

The Pacific coast region, west of the Rocky Mountains, from British Columbia to southern California.

DESCRIPTION.

Length, 5.75 in.; extent, about 10 in.; tail, 2.25 in. Bill and feet, brown. Eye, brown. Male:—Head, neck, back, rump, and breast, rosy red, brightest on the head and throat. Wings and tail, brown, the feathers being edged with reddish. Under parts dull brownish.

Female and young:—Upper parts olive brown, rather brighter on the rump. Under parts white, marked in streaks with olive brown.

NEST AND EGGS.

This finch nests preferably in coniferous trees, although often nests are found in other varieties. Most all of them are placed near the top of the tree. The nest is composed of grasses and fibres and lined with hair. In May they lay from three to five eggs of a bluish green color sprinkled rather sparsely with reddish brown, these markings being sometimes chiefly at the larger end and at others over the entire surface.

HABITS.

This western form of the Purple Finch of eastern North America is an abundant summer resident of some parts of British Columbia, chiefly west of the Cascade Mountains, and on Vancouver Island. But though affecting a large range of country, it is rather local in its distribution, owing to its fondness for certain kinds of food, and its partiality to nest in certain woody sections, especially low growths of coniferous trees. It is generally from the topmost bough of a member of this family of trees, that the pleasing refrain of the male of this species is heard from early spring-time till the middle of the summer, or until after the nesting period is over, when it begins to moult, and its melody generally ceases for the year.

To the residents of the rural sections, and especially to those interested in gardening, the appearance and food seeking habits of this species may soon become known, and for the credit of the bird's harmlessness, unpleasantly so, for if the horticulturist is interested in the development of turnip, cabbage or other small seeds of that character, companies of these birds will make daily visits to the premises, until every seed is appropriated, if means are not taken to prevent the loss. This species also feeds on various kinds of small fruits, both wild and cultivated, and also, especially when the young are to be fed, on various kinds of insects. It usually

places its nest at the top of a medium sized balsam, or other conifer, or among the thick vines, or where small shoots project from the sides of a small sized deciduous tree.

With the exception that the nest and eggs are both larger, they closely resemble those of the chipping sparrow. If the first clutch is taken the female lays again, otherwise she raises but one brood in a season.

When not much disturbed she prefers to nest in the vicinity of human dwellings, rather than in the wilder woods, and at no time does it penetrate far into the pathless forest. When the nesting period is over, this species generally associate in small flocks, and in the spring season these do much damage to the fruit trees by picking the blossoms and buds. The male in the spring is a handsome bird with his rosy red plumage and clouded brown back. The more plainly colored female is altogether of a duller hue than the male, and in general appearance might be taken for a female English sparrow.

WM. L. KELLS.

AUTUMN BIRD GOSSIP.

'I hear the cry
Of their voices high,
Falling dreamily through the sky.'

—LONGFELLOW.

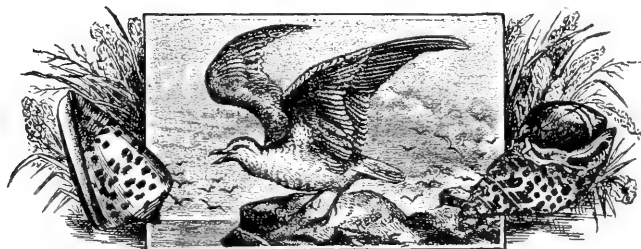
There is a decided pleasure that savors not at all of spring time enthusiasm, in observing the autumn and winter migrants. A quiet content seems to permeate their life and movements that tends to impress one with the similarity between their characteristics and emotions, and our own. They, like us, seem imbued with a consciousness of the sadness of the season that precedes the bitter days of ice and snow. The enthusiasm of love and courtship has passed away, and the content of accomplishment is upon them, the peace of the aftermath as it were. Their gregariousness is a strong evidence of their freedom from the individual interests that so absorbs them during the season of parental cares, and now they are willing to quietly enjoy the rest and pleasure of friendly association with their kind.

Only the other day I met a flock of migrants consorting as merrily as a party of human pleasure seekers out for a holiday. There were white-throated and white-crowned sparrows, and by the way, there is no more stylish, dapper young dandy in bird society than your white-crowned sparrow, whose every movement betokens a supercilious vanity quite in keeping with his human prototype, Juncos in abundance were with the party and also a few groundsels—a gold finch or two—and I heard though I did not see, a bluebird "with a bit of blue sky for a back," but there

was no mistaking his autumnal song note of "cheery-up" and "thorough-wort." And by the way, I had an opportunity this fall while crossing Lake Huron on a steamer, of associating intimately for several hours with a number of these migrants. After a heavy gale on the previous night which doubtless blew the migrating birds out of their course seaward, our boat was boarded by juncos, white-throated sparrows, pine warblers, yellow warblers, a pair of wrens, a grackle, a Blackburnian warbler, and a black-throated blue warbler, and exhaustion and hunger had rendered them so tame that they hopped about our steamer chairs like pet chickens, picking up the numerous insects that swarmed about the deck. It was a truly delightful experience to a bird lover, this intimate association with birds naturally so shy and timid.

Another sign of the approach of winter is the return to city quarters of the English sparrows from their summer residence in the surrounding country where many of them had the good sense to immigrate during the heated term. After all these poor little beggars are better than no feathered associates to house-bound ornithologists during the long winter days, and after all is said and done. they are birds, and no bird is without interest. A few robins are to be seen here in the deep woods during the winter, also an occasional blue jay and crossbill, but for constant association we have to depend mostly upon the chickadees, nuthatches, woodpeckers, crows and their ilk. However, if one is interested, there is always a good deal of wild life about, if one but takes the trouble to seek it out, for my observation has taught me that, in reason, one can always find what one looks for.

ALBERTA A. FIELD.



A STRAY SHOT.

It was early in the morning, that is early for the use of the camera, and I was walking briskly through a pasture, which was dotted here and there with clumps of thorn and oaks. I was on my way to the home of a bird, the growth of whose family I was interested in. As usual, I had with me a complete line of picture taking utensils, and was prepared to



Photo from life.

ON GUARD.

spend the day, if necessary, to obtain the desired views. A shadow crossed the path; glancing up, I caught sight of a Brown Thrasher, just disappearing into a low bush, and saw that she carried a grub of some sort in her bill. Naturally, I stepped over and parted the branches, to see what she was doing there. Evidently I broke in upon them at just dinner time, and Mrs. Thrasher was very much displeased, for she did her best to drive me away from her nest. Hissing and squealing, and with wings and tail spread, she kept darting towards me, and once even pecked the fingers that held the branches aside. I had seen no sign of the male bird, but as I turned to leave, I saw him perched on a dead twig above the next bush. As he was so quiet I decided to photograph him if I could. He was a very accommodating bird, and remained still while I went back to the path, got the camera, set it up, focused it, and got an exposure. This was one of the many stray shots that are obtained. It was taken with the back combination of the lens, at a distance of about fifteen feet.

C. ALBERT REED.

THAT "ENGLISH" SPARROW.

(*Passer domesticus*.)

Perhaps there is not one of our feathered acquaintances that is so unjustly abused by all as our little friend, *Passer domesticus*, that "English" Sparrow. To be sure he is a willful little creature and takes delight in tantalizing his smaller door yard neighbors, but bleak indeed would be our city streets, when baked by the summer sun, or clothed in the chilling snows of winter, were it not for his cheery chirp. It is with the hope that

a little of the interest, so freely lavished upon some more beautiful, may be tendered a deserving one, though a mere waif of the streets, that I offer this short anecdote. In the back door yard of my home, there stands a large apple tree which a family of cat birds once made their home. While walking about one morning as the tree was just coming into bloom, I noticed a small bird busily engaged in the old cat bird's nest. Upon investigation I found it to be none other than an English sparrow, but could not just understand what he was about. Presently he darted away with a stick that he had stolen, and flew straight to an old tree where I discovered the outlines of his nest. This was of great interest to me and I resolved to watch him, as domesticus, in this locality at least, rarely builds his nest in trees, choosing rather some nook about the house or stable. In a short time he was back, selecting again one of the outside sticks of the nest. Back and forth he went, again and again, until within a very short time the old cat bird's nest had entirely disappeared, and had been transformed into the nest of *Passer domesticus*, in the old tree.

It may have been that the mere abundance of nesting material in this place caused the little fellow to return from time to time, but the fact that he first took the sticks from the outside and then, as his own nest increased, those of the inner, ending with the soft stuffs that lined the old nest, suggests to me that perhaps even the despised little English sparrow possesses more of that higher instinct, call it "reason" if you will, than we accredit him with.

SHERIDAN R. JONES.

A BIRD STRATEGIST.

So far as is known to any of us boys, there is but one pair of Broad-winged Hawks in Kennebunk, Me.; and these have, for four years, persistently nested in the same locality, a wooded valley on the river bank, and for four years they have been robbed. In 1898 I saw one of the birds with about three feet of rope in its talons going to the nest, and in June I found the young about ready to fly.

The next year they built about half a mile from the old site, and the young birds were taken. In 1900 they used the old nest of the first year. This year the old hawk seemed to know that all the boys were on the watch for her eggs, and that extra precautions would be necessary, so she set her wits to work to outgeneral them. On the 24th of April I was strolling down that way, when I saw in a tall pine, a mass of sticks and moss, looking like a last year's squirrel's nest. After looking at it from all sides, I went on thinking it nothing but a bunch of sticks. I went to the tree where the nest of '98 had been and found there was a crow's nest in the top, the hawk's nest being empty and unrepaired.

Three days later I saw the hawks carrying sticks to the mass that I had supposed to be a squirrel's nest. They completed this nest and then I did not see them for several days. On the fourth day somewhat disgusted I walked on to the old original claim and when within about ten feet of the tree off went Mrs. Hawk with a scream that made my hair stand on end. I went up that tree fast. In the old nest was as fine a specimen of hawk egg as I ever saw. It was lavender gray with blotches of dark chestnut. Two days later I went again, but the eggs had been taken. On my way back I stopped at the new nest, built this year, and found an egg of the same size and color but covered with fine brown markings. Now the question is, did Madame Hawk build a second nest just to throw the boys off the scent and then use it when she found her ruse had not succeeded? If so she is a smart old bird.

GEORGE W. FISK.

THE ADVENTURE OF A YOUNG SANDPIPER.

One day late in July, I was walking along a narrow path by the shore of the lake. On one side of me were thick clumps of briars and birches, and on the other, a broad level sandflat reaching to the water. Every few feet along this flat, were clumps of tall and waving reeds. As I was passing one of these, I was startled by a whirr of gray wings, and a large female sandpiper flew straight out to a small pebbly beach, where I could just see her teetering body and hear her anxious peeps. I knew she had just left her nest, ran a few feet, and then suddenly flown. Determined to find the nest I moved forward cautiously scanning every inch of sand, and each clump of reeds until I found it, which took me no short time. I took one of the four spotted eggs which were in the nest, and quietly left. When I reached home I placed it in my egg case, intending to blow it the next day, but it was forgotten, and it was the third day before I thought of it again, I hastened to the box, and upon opening it a faint but clear "peep, peep" greeted me, and over in one corner was a young sandpiper, it having hatched in the warm cotton. I gave my foster child a little warm milk, which he greedily sucked from the palm of my hand. The next morning I returned him to his nest, where he was probably greeted in true brotherly fashion, for the others had hatched. The following day I went to the nest again to see how they were, but was disappointed for the nest was empty. Probably they were out on the little pebbly beach taking their first lessons in teetering.

A. L. HARRIMAN.

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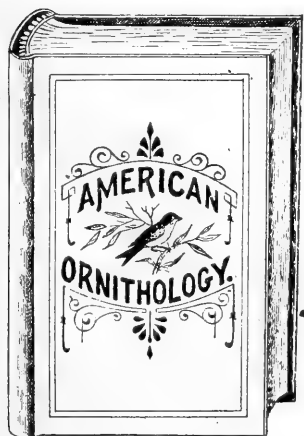
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